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ABSTRACT

This report provides an overview of the latest available racial and ethnic data on high school completion rates, college participation and enrollment trends, and degrees conferred. Major data sources are reports of the U.S. Bureau of the Census and the National Center for Educational Statistics. The report also includes a special focus on state enrollment trends for students of color, especially from 1980 to 1990. State trends are identified for African Americans, Hispanics, Asian Americans and American Indians at both 2-year and 4-year institutions and graduate and professional programs. Additionally, current information from eight states is used to assess preliminary effects of the recession on minority enrollments. Among trends identified by the report are the following: (1) the gender gap in the high school completion rate has widened especially for Hispanics with male Hispanics graduating at a record low of 47.8 percent in 1991; (2) the gap between white and African American high school graduates in college participation has increased 4 percent since 1990; and (3) students of color (especially females) gained in number of degrees awarded from 1989 to 1990; (4) graduate schools recorded more frequent gains in minority enrollment than did professional schools; and (5) gains in the 1980s are being challenged by state budget problems, including major tuition increases. Twenty-six tables provide detailed statistical data supporting the report's findings. (DB)

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Minorities in Higher Education

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1992

Seventh Annual

Status Report

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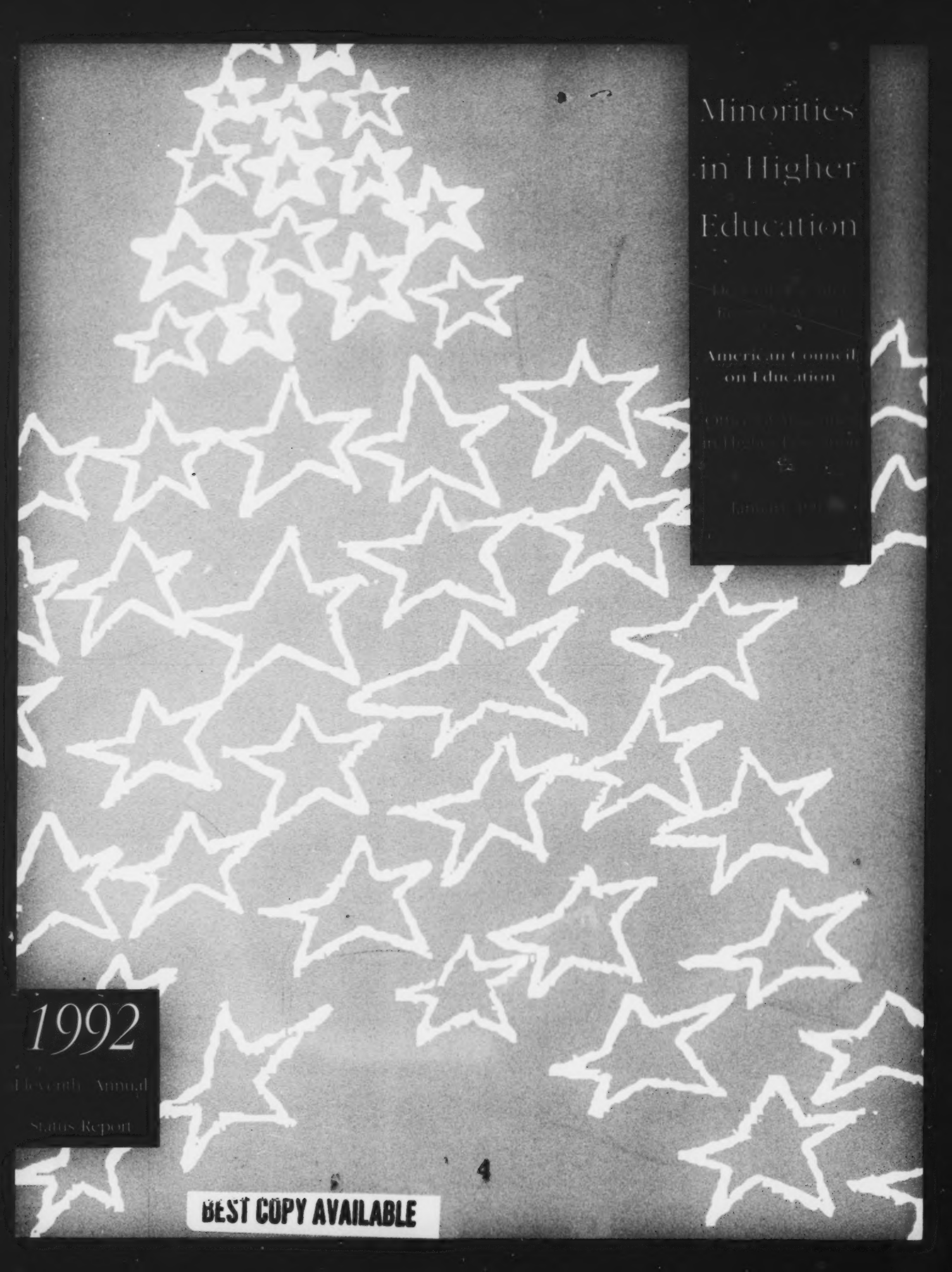

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Acknowledgements

The Office of Minorities in Higher Education of the American Council on Education is pleased to issue the *Eleventh Annual Status Report on Minorities in Higher Education*. This report has become an integral part of the Council's effort to inform our constituency of significant trends and issues for minorities. We hope the special focus on state enrollment trends for students of color will be informative to policy makers and administrators who are grappling with minority access and retention issues in the wake of severe state budget reductions.

Your comments and suggestions on ways to improve the report are always welcome. This report would not have been possible without the support of Charles Dervarics, Lachone Fuquay, Linda Mabrey, Ray Porras, and Bernice Davis. Special thanks are also extended to those who served as reviewers, especially Charles Andersen, Elaine El-Khawas, David Merkowitz, and Cecilia Ottinger. This report has been produced under a generous grant from the Philip Morris Companies Inc.

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Foreword

This is the eleventh Annual Status Report on Minorities in Higher Education released by the Office of Minorities in Higher Education (OMHE) of the American Council on Education (ACE). This year's report provides an overview of the latest available racial and ethnic data on high school completion rates, college participation and enrollment trends, and degrees conferred. As in past years, the major data sources for this report include the U.S. Bureau of the Census's *Current Population Reports* and the Higher Education General Information and Integrated Postsecondary Education Data System survey reports of the U.S. Department of Education's National Center for Education Statistics (NCES).

OMHE must note once again that U.S. Census Bureau data on high school completion and college participation rates for Asian Americans and American Indians are not available on an annual basis. Because of this lack of information, it is not possible to calculate high school completion and college participation rates for these groups every year. Again, we emphasize the need for such information and encourage the federal data collection systems to improve their annual efforts to monitor the college-going patterns of all racial and ethnic groups. In addition, it is just as important for state higher education coordinating boards and governing boards to ensure the annual collection and reporting of racial and ethnic college enrollment and earned degree data by institution.

This year's status report also includes a special focus on state enrollment trends for students of color, focusing primarily on the period from 1980 to 1990. This section provides a detailed look at state trends for African Americans, Hispanics, Asian Americans, and American Indians at both two- and four-year institutions and in graduate and professional programs. In these categories, we have analyzed the percentage changes in enrollment and changes in the proportion of ethnic minorities within total enrollment. For this section, the report relies heavily on 1980 and 1990 population and enrollment data provided by the U.S. Census Bureau and the U.S. Department of Education's NCES.

In addition, the special focus also contains data gathered from eight states to assess some of the preliminary effects of the recession on minority enrollments. This section is based largely on interviews with state-level personnel and data supplied by state higher education commissions and departments of education. We caution that our canvassing and analysis is designed to provide only a limited snapshot of certain trends within these states. Nonetheless, given the gravity of the budget problems in many areas of the nation, we consider this information important as policy makers debate the direction of higher education in the 1990s.

Executive Summary

High School Completion

• The high school completion rates for whites, African Americans, and Hispanics all declined slightly in 1991, primarily due to lower rates among men. This trend widened the long-standing gender gap in all three groups, a gap that had showed signs of narrowing in 1990. Among both men and women, the decline was slightly greater for African Americans and Hispanics than for whites.

• The gender gap in completion rates was most notable among Hispanics, where the rate for men dropped 6 percentage points to a record low of 47.8 percent in 1991. This is the lowest completion rate for Hispanic men since the Census Bureau first began collecting data on Hispanics in 1972.

• The high school completion rate for Asian Americans is higher than the rate for whites and for the general U.S. population. However, the rate for American Indians is the lowest among the four major ethnic minority groups; American Indians complete high school at a rate 10 percentage points below the rest of the nation's 18-to-24-year-old population.

College Participation and College Enrollment

• Whites remain much more likely than African Americans or Hispanics to participate in higher education, even though the white college-age population continues to decline. Hispanics reported a slight gain in participation during 1991, however, while African Americans experienced a small decrease. As a result, the gap between participation of white high school graduates and African American high school graduates has increased 4 percentage points since 1990.

• More Hispanic high school graduates are participating in American higher education, but the increase consists almost entirely of gains among Hispanic women. Among high school graduates ages 18 to 24, the number of Hispanic women attending college increased nearly 10 percent from 1990 to 1991, reaching its highest level ever. By comparison, at least one indicator of college participation showed a record low among Hispanic men in 1991.

• All four ethnic minority groups showed small to moderate increases in college enrollment from 1990 to 1991. Most of these gains occurred at two-year institutions, which recorded a 13.4 percent gain compared with a 5.9 percent increase at four-year colleges and universities.

• Men of color and women of color registered nearly equal gains during the 1990-91 period. Overall, minority men recorded a 8.8 percent enrollment increase, while the rate for minority women increased by 9.4 percent. African American men, long underrepresented in higher education, accounted for an increase of 6.5 percent, for this period.

Degrees Conferred

• As a group, students of color achieved small gains in the number of degrees awarded from academic year 1989 to academic year 1990. Overall, these gains ranged from 5 percent at the associate degree level to 9.5 percent at the first professional level. Women of color posted larger gains than men of color at all four major degree levels.

• African Americans showed their largest proportional gain in master's degrees from 1989 to 1990, while Hispanics posted their largest increase at the bachelor's degree level. Asian Americans continued to show small to moderate gains in all categories, though in several areas this growth was at somewhat lower levels than in the mid-1980s. For African Americans, Hispanics, and Asian Americans, the number of women earning degrees increased at a higher rate than the number of men in most bachelor's and master's degree areas.

• Minorities are continuing to return to education and the social sciences in larger numbers, a trend first documented in the *1991 Minority Status Report*. From 1989 to 1990 at the bachelor's level, a 10.2 percent increase in social sciences was the largest gain for minorities among the six major degree fields. At the master's level, social sciences again had the largest increase—15.1 percent for minorities from 1989 to 1990. The gains for education, though more modest, provided further evidence that students of color are beginning to reverse

Photo credit: Cornell University

a lengthy decline and return to this important field in greater numbers.

• At the same time, minorities were reporting much smaller growth in engineering in the late 1980s than earlier in the decade. Overall, students of color registered a slight (1.2 percent) gain in baccalaureate engineering degrees from 1989 to 1990 and a 2.1 percent decline at the master's level during the same period. These figures are in sharp contrast to the steady increases in engineering degrees during the early and mid-1980s. Growth in the number of business degrees continued at both the bachelor's and master's levels from 1989 to 1990, but at a lower rate than the growth in education, social sciences, and other categories.

• Asian Americans and American Indians achieved the greatest percentage growth in the number of doctoral degrees awarded from 1990 to 1991, even though American Indians represented only a tiny fraction of all degrees conferred. African Americans registered only a small increase for the year, while Hispanics experienced a slight decline.

Special Focus: State Enrollment Trends for Students of Color

State Higher Education Enrollment Trends, 1980 to 1990

• In 1990, students of color made up a larger share of total enrollments at two- and four-year institutions than in 1980. But these gains generally lagged far behind the actual population increases for minorities during the 1980s.

• Overall, more than 30 states reported larger increases in total enrollment at the two-year level than at the four-year level from 1980 to 1990. In more than half the states, African Americans, Hispanics, and American Indians also experienced larger gains at the two-year level than at the four-year level. From these data, it is clear that educators still need to improve articulation efforts between two- and four-year institutions, so that gains at two-year colleges promote progress at baccalaureate institutions.

• States generally enrolled more minorities in 1990 than in 1980, but in most cases total enrollments in higher education also increased. As a result, few states showed significant gains in the actual proportion of African Americans, Hispanics, and American Indians among the total student population. In most states, these ethnic minorities remain far underrepresented compared with their share of the state's citizenry.

• Twenty-one states doubled their two- and four-year enrollments of Asian Americans during the 1980s while at the same time doubling their Asian American population during the decade. By comparison, African Americans, Hispanics, and American Indians recorded slower enrollment and population growth.

State Trends in Graduate and Professional School Enrollments, 1980 to 1990

• Nationally, graduate schools recorded more frequent gains than pro-

fessional schools in state enrollments from 1980 to 1990. Among all the states, only two showed declines in graduate enrollment, while 29 states cited losses at professional institutions.

• Thirty-one states cited progress among African Americans in both graduate and professional enrollments, including eight that doubled their enrollments. Yet the actual number of students remained abysmally low; four states had ten or fewer African Americans enrolled at the graduate level, while 12 states had as few at the professional level.

• Hispanic and Asian American enrollment in post-baccalaureate programs rose considerably during the 1980s. Among Hispanics, four states failed to show gains at both levels and 14 states doubled their graduate and professional enrollments. Thirty states doubled Asian American enrollments at both levels and some showed threefold and fourfold gains. Similar to the gains among other ethnic minorities, the improvement among Asian Americans was greater at the professional level than at the graduate level.

• American Indians showed large percentage gains but few numerical gains from 1980 to 1990. Although 27 states reported progress at both the graduate and professional levels, the numbers remained very small. For example, 24 states had ten or fewer American Indians enrolled at their professional institutions in 1990.

Recent State Enrollment and Financing Trends, 1990 to 1992

• Nationally, students of color made enrollment gains in American higher education during the late 1980s. But recent state budget shortfalls have created a variety of different issues and challenges in many regions of the country that may affect student enrollments during the 1990s.

• In 1990 and 1991, many states, including those with large numbers of ethnic minorities, continued to report limited progress in minority enrollment despite state budget problems. However, more recent state budget cuts have further reduced funding for higher education, forcing many institutions to raise fees and more students to seek financial aid, often in the form of loans.

• Preliminary 1992 data indicate that several key states experienced enrollment declines that coincided with major tuition increases in those states. Other surveys have reported similar findings. In a separate December 1992 ACE survey, seven of 19 states reported lower total enrollments for fall 1992 than for fall 1991. Of these seven, five provided less money for higher education this fall than two years ago, and a sixth provided the same level of funding.

• A number of states with higher minority enrollments during the recession also have increased support for financial aid to offset rising college costs. Many of these states have provided more support for financial aid while at the same time reducing support for public colleges and universities because of budget constraints.

• States continue to confront a variety of problems in enrolling more minority students. In Pennsylvania, African American lawmakers complain about the lack of enrollment progress at the state's colleges and universities. In California, students, administrators, and others worry about potential long-term damage for all ethnic minorities because of the state's budget troubles.

• More states are beginning to study or impose enrollment "management" practices to control the growth of public higher education institutions. Although it is possible to administer such programs in a way that continues to promote minority access, little research is available on the effects of these programs on students of color. We urge both states and the higher education community to undertake this research and to closely monitor enrollment management practices so that such policies, when necessary, do not reduce access or jeopardize efforts to increase minority enrollment.

High School Completion Rates

This section analyzes the most recent high school completion (HSC) rates for white, African American, and Hispanic 18-to-24-year-olds nationwide, based on the Census Bureau's 1991 Current Population Survey (CPS). These data include students who earned either a high school diploma or an equivalency such as a General Equivalency Diploma (GED). The CPS data do not produce year-to-year HSC rates for American Indians or Asian Americans because the survey sample is too small to provide reliable estimates. This report will use other Census information to describe changes in these groups.

The 1991 CPS shows a slight decrease in high school completion rates for whites, African Americans, and Hispanics compared with 1990 figures (Table 1). Among all three groups, this trend was due primarily to lower completion rates among men (Table 2). This decline also served to widen the gender gap in all three groups, a gap that had showed some signs of narrowing in the completion rates for 1990.

For African Americans, 75.1 percent of 18-to-24-year-olds completed high school as of 1991, down nearly 2 percentage points from the previous year. Since 1970, the HSC rate for African Americans has increased by more than 15 percentage points, although it has stagnated since the mid-1980s.

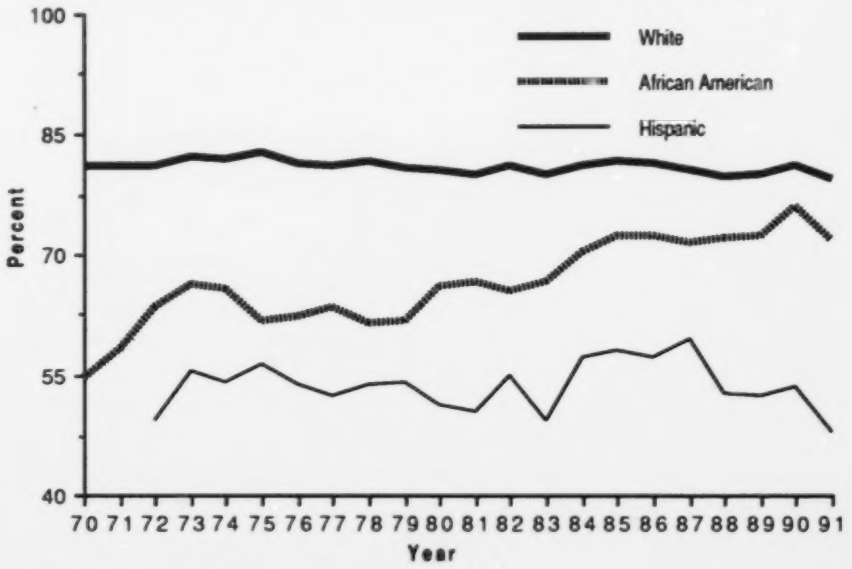
Whites had a completion rate of 81.7 percent in 1991, slightly lower than their rate of 82.5 percent in 1990. Since 1970, the rate for whites has remained between 81 percent and 83 percent while African Americans have slowly closed the gap between the two races.

In 1991, the HSC rate for Hispanics declined to 52.1 percent, a drop of more than 2 percent from the previous year. This decline is entirely due to a sizable decline among Hispanic men, which overshadowed a small increase in the rate for Hispanic women. Overall, the HSC rate for Hispanics remains the lowest of the three groups. Although Hispanics have not sustained long-term improvement in their HSC rates during the mid-1980s, the data show some improvement. With the most recent decline, the 1991 completion rate is the lowest registered since 1972, when these data were first reported for Hispanics. It also is more than 10 points down from the high mark of 62.9 percent reached in 1985.

A Wider Gender Gap

Since the 1970s, women have completed high school at higher rates than men in all groups, particularly African Americans and Hispanics. This gap ranged from 6 percent to 10 percent for African Americans and from 4 percent to 9 percent for Hispanics through-

Figure 1
High School Completion Rates for 18-to-24-Year-Old Males by Race/Ethnicity, 1970-1991



Source: Bureau of the Census Current Population Reports and unpublished tabulations for October 1992

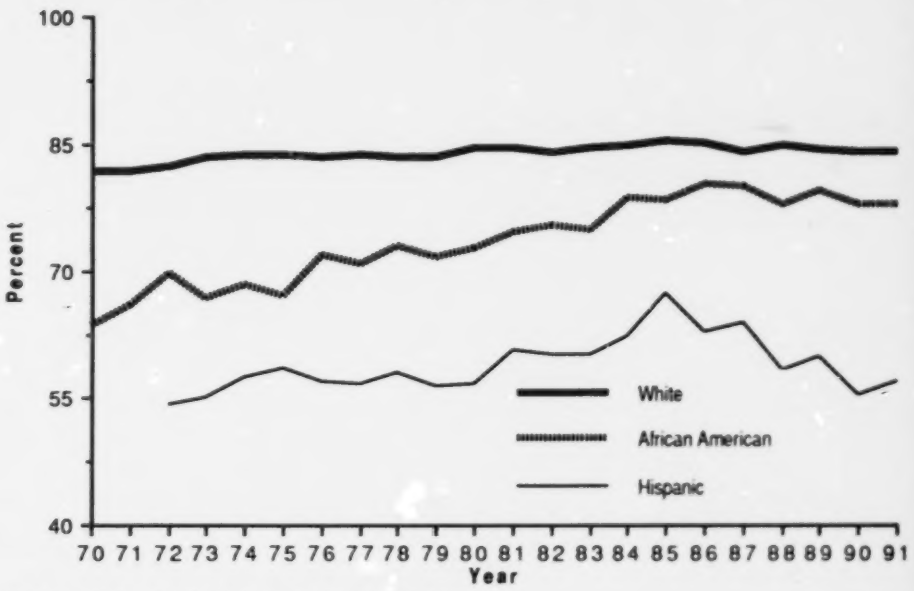
out much of the 1980s. In 1990, however, these gaps narrowed slightly as men reported increases while the rates for women remained the same. But in 1991, the gender gap widened among all three groups (Table 2).

The HSC rate for African American men decreased from 75.9 percent in 1990 to 71.8 percent in 1991. At the same time, the rate for African American women remained steady at 77.8 percent. The resulting gap of 6 percent is 4 percentage points larger than in 1990 and more reflective of the disparities evident during the 1980s. It should be noted, however, that statistical data from CPS may vary from year to year. Figures cited here are national aggregates, and actual rates for urban and rural areas are lower for some groups.

The gender gap was most notable among Hispanics, where the completion rate for men declined a sizable 6 percentage points, from 53.7 percent in 1990 to 47.8 percent in 1991. Among men, 1991's rate was the lowest on record since the Census Bureau began collecting these data for Hispanics in 1972. In addition, it is only the second time since 1972 that the completion rate among men fell below 50 percent of the 18-to-24-year-old Hispanic population.

White men also experienced a slight decline in HSC, from 81.1 percent in 1990 to 79.3 percent in 1991. The rate for white females remained constant at nearly 84 percent. Nationwide, the Census data showed a completion rate of 78.9 percent for all 18-to-24-year-old men in 1991, down slightly from 80.6 percent in 1990. Among women, the completion rate was basically unchanged at 82.9 percent.

Figure 2
High School Completion Rates for 18-to-24-Year-Old Females by Race/Ethnicity, 1970-1991



Source: Bureau of the Census Current Population Reports and unpublished tabulations for October 1992

High School Completion for Asian Americans and American Indians

For American Indians, this report will use information from the 1990 decennial census, a one-time snapshot of educational attainment among citizens age 25 and over. For Asian Americans, the report will cite a 1991 Census Bureau analysis of education and earnings of the Asian and Pacific Islander population. In both of these reports, the HSC data are not directly comparable to the above-mentioned rates for whites, African Americans, and Hispanics because of the different age groups.

In 1990, the Census reported that 65.5 percent of American Indians and Alaskan Natives age 25 and over had completed four or more years of high school.[1] By comparison, the rate for the entire United States was 75.2 percent. The decennial data indicate a moderate gain for American Indians since 1980, when the HSC rate was 56 percent.

The 1990 data for American Indians and Native Alaskans show some fluctuations on a regional basis. Northeast and Midwest regions generally posted an HSC rate of 66 percent to 68 percent, while states in the Pacific region had the highest rate at 70 percent. By comparison, Mountain states had the lowest regional HSC rate for American Indians at 59 percent. States in this region included New Mexico and Arizona, which rank among the top five Census states in American Indian population. New Mexico and Arizona had completion rates of 58 percent and 52 percent, respectively, based on these data.

The 1991 Census analysis of the Asian American and Pacific Islander population showed a much higher completion rate of 82 percent among those age 25 and over.[2] This figure also slightly exceeded the 80 percent completion rate for whites and the 78.4 percent rate among the general population, the report says. The HSC rate for Asian Americans was even higher—82 percent—in Western states, where Asian Americans and Pacific Islanders are most concentrated.

College Participation Rates

College participation rates provide important data for evaluating the access of minorities to higher education. Unlike enrollment figures, which provide a snapshot of college attendance for a particular period of time, participation rates track both the current enrollment and the recent postsecondary attendance patterns of a given age group, particularly youth ages 18 to 24.

Participation rates are available in three forms: the percentage of all 18-to-24-year-olds enrolled in college; the percentage of high school graduates ages 18 to 24 enrolled in college; and the percentage of graduates ages 14 to 24 who either are enrolled in college or have completed one or more years of their education. This last category also is referred to as the "ever-enrolled-in-college" rate.

This section is based primarily on college participation information reported in the Census Bureau's CPS. But CPS data should be viewed with caution, because they usually provide only a general outline of participation rates.[3] This section will focus mainly on the "ever-enrolled-in-college" rate as well as the percentage of all 18-to-24-year-olds enrolled in college.

Nationwide, the CPS data indicated a notable decrease in the number of college-age youth in America during the past decade. From 1981 to 1991, the total population of 18-to-24-year-olds declined by 15 percent, a loss due primarily to an 18 percent decline among whites. For example, the 18-to-24-year-old white population was at its lowest level since 1970. African Americans also experienced a college-age population decrease of 7 percent from 1981 to 1991, while the number of Hispanics in this age group increased by 40 percent (Table 1).

Despite these findings, however, whites are much more likely than African Americans or Hispanics to participate in higher education. For 1991, 34.1 percent of all white 18-to-24-year-olds were enrolled in college, compared with 23.6 percent of African Americans and 18 percent of all Hispanics. For whites and Hispanics, the 1991 participation figures represented a slight gain from the previous year, while African Americans showed a 1.8 percent decline from 1990.

African Americans

African Americans have realized some improvement in college participation since 1985, yet they have failed to reduce the sizable gap between their rates and the rates for whites. In 1991, 31.5 percent of 18-to-24-year-old African American high school graduates were enrolled in college, up from 26.1 percent in 1985 (Table 1). But the rate among white high school graduates increased by more than 7 percentage points to 41.7 percent during this same period. The gap between participation rates for whites and African Americans also increased from 6 percent in 1990 to 10 percent in 1991.

If we look at statistics by gender, African American women experienced a slight decline from 1990 to 1991 in the participation rates of high school graduates in college. Nonetheless, the 1991 rate of 30.9 percent reflects a 6 percent gain for African American women since 1985. By comparison, however, the participation rate for white female high school graduates increased more than 3 percent to 42.1 percent in 1991 and has increased by 9 percent since 1985, thus widening the gap between the two groups.

During the 1980s, African American female graduates showed more progress in participation than African American male graduates. Yet thus far, the 1990s show a reversal in this trend. In 1991, 32.2 percent of African American male high school graduates enrolled in college, compared with the 30.9 percent figure for females.

African Americans also trailed whites in the "ever-enrolled-in-college" rate, the percent of 14-to-24-year-old high school graduates who are currently enrolled or who have finished at least one year of postsecondary study. The rate for African Americans declined from 48 percent in 1990 to 46.1 percent in 1991. By comparison, whites registered an increase from 60.1 percent in 1990 to 62.3 percent in 1991. Since 1988, the "ever-enrolled" rate has stagnated for African Americans while the rate for whites has grown by about 4 percent.

Photo credit: Shelley Kusnetz, Drew University

By gender, the 1991 statistics show declines of 2.1 percent in the "ever-enrolled" rate for African American women and a 1.6 percent drop for African American men. Nonetheless, in keeping with the trends evident in 1990, African American men had a slightly higher "ever-enrolled" participation rate of 47.3 percent. By comparison, the rate for African American women was 45.2 percent.

The gap between white and African American women in the "ever-enrolled" rate also increased from 14.1 percent in 1990 to 19.3 percent in 1991, primarily because of a gain among whites. Since 1985, the "ever-enrolled" rate for white females has increased by 9 percentage points, compared to a 1 percentage point gain for African American females. White men also registered a small 1 percent increase in the "ever-enrolled" rate for 1991. The "ever-enrolled" rate for white men was 59.9 percent in 1991, compared with 47.3 percent for African American men. This gap largely has remained in the 10 percent to 12 percent range since 1985.

Hispanics

Despite minor progress in 1991, Hispanics continue to record low college participation rates among the 18-to-24-year-old population when factoring in both high school graduates and those who fail to earn a high school diploma. Overall, the total Hispanic population ages 18 to 24 had a college participation rate of only 18 percent in 1991, well below those for whites and African Americans. This low figure can be traced to the abysmally low HSC rates among Hispanics; as mentioned earlier, the data show that just over half of the Hispanic 18-to-24-year-old population had earned a high school diploma in 1991. This HSC rate trails the rates for whites and African Americans by more than 20 percentage points.

Among Hispanics who do graduate from high school, however, the data show somewhat more positive findings. In 1991, 34.4 percent of all Hispanic 18-to-24-year-old high school graduates enrolled in college, an increase of 5.4 percent from 1990 (Table 1). The 1991 rate is the highest for Hispanics since the mid-1970s and is nearly 3 percentage points higher than the 1991 rate for African Americans. Nearly all of these gains, however, occurred among Hispanic women.

Among high school graduates, 39.1 percent of Hispanic women ages 18 to 24 enrolled in college, up nearly 10 percent from 1990 and the highest level ever recorded in this category since Census began collecting data on Hispanics in 1972. As noted earlier in this document, CPS data should be evaluated with caution because they provide only a general outline of participation rates.

By comparison, the rate for Hispanic men was 29.3 percent, reflecting only a slight upward change from the previous year. It is the second consecutive increase for Hispanic men, although their 1991 participation rate is still below the 30.3 percent registered in 1986. The rate for white men in this category is 41.9 percent, and for African American men is 32.2 percent.

Hispanics also showed an increase in the "ever-enrolled" rate for 1991, again largely because of an increase among women. Overall, the rate for Hispanics was 47.6 percent, up nearly 3 percent from 1990. It was only the second time since 1985 that Hispanics had a higher "ever-enrolled" rate than African Americans, though both trailed the 62.3 percent rate among whites for the year.

An analysis by gender shows that the "ever-enrolled" rate varied widely for Hispanics. Hispanic women recorded a sizable gain of 9 percentage points to 52.4 percent in 1991, making it the highest level since the Census began collecting these data for Hispanics in 1972. But Hispanic men experienced a decline of 4 percentage points to 42.2 percent, which represents the lowest participation rate on record. Overall, Hispanic men trailed African American men by 5 percent and white men by 17 percent. Again, we add a word of caution about year-to-year changes in CPS data and look forward to evaluating longer-term trends in this category next year.

College Enrollment Trends

In contrast to college participation rates, the actual enrollments of minority students in higher education increased steadily throughout the 1980s. This trend of moderate growth has continued into the 1990s as students of color showed a 9.1 percent enrollment gain from 1990 to 1991, including a 13.4 percent gain for minorities at two-year institutions and a 5.9 percent gain at four-year institutions (Table 4). These data are provided by NCES and form the bases for the findings contained in this section of the report. NCES bases its data on the Higher Education General Information Survey and the Integrated Postsecondary Education Data System fall enrollment surveys.[4] Information on historically black colleges and universities (HBCUs) is taken from the National Association for Equal Opportunity Research Institute.

All four ethnic minority groups helped achieve the enrollment increase from 1990 to 1991, as each showed gains of 7.1 percent to 11.2 percent. Overall, enrollment of men of color increased 8.8 percent for the 1990-91 period, compared with a 9.4 percent increase for women of color (Table 5). Nonetheless, much of this progress occurred at two-year rather than four-year institutions. Students of color achieved a 13.4 percent gain at two-year colleges compared with a smaller 5.9 percent increase at four-year institutions (Table 4).

Among all students, the nation posted a gain of 3.9 percent in total enrollment from 1990 to 1991. Again, two-year colleges showed the greatest gain—7.9 percent—compared with a 1.5 percent increase at four-year institutions. In addition, the 9.1 percent increase among students of color surpassed the 2.5 percent gain reported among whites. Similar to the trend for minorities, white students achieved their greatest gain (6.2 percent) at two-year colleges. By comparison, their enrollments at four-year institutions in 1991 showed only a slight gain from 1990.

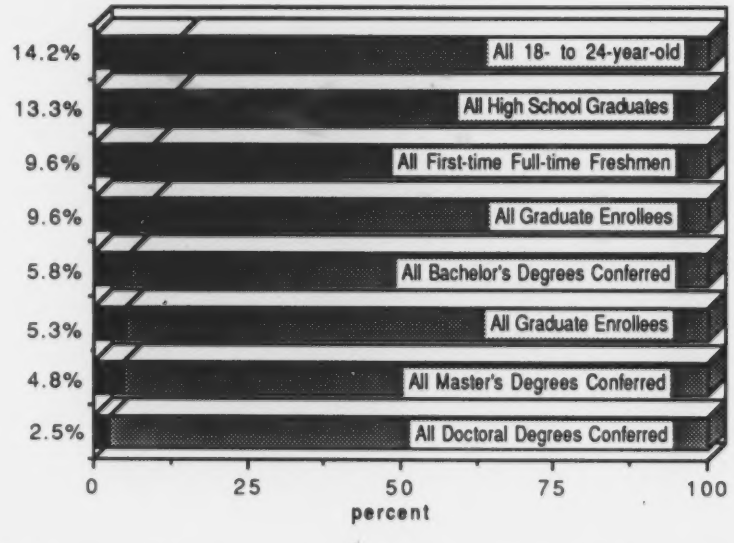
In other categories, women achieved a 4.3 percent total enrollment gain from 1990 to 1991, which was slightly ahead of the 3.5 percent increase recorded by men (Table 5).

Undergraduate enrollment also rose at a slightly faster rate than graduate and professional education from 1990 to 1991 (Table 6), although all three categories showed small gains.

African Americans

African Americans recorded a 7.1 percent gain in total enrollment in higher education from 1990 to 1991, building on the moderate increases achieved during the late 1980s (Table 4). African American men played a major role in this increase, as their 6.5 percent gain was nearly equal to the 7.3 percent gain recorded by women (Table 5). In 1991, 517,000 African

Figure 3
African Americans in the Education Pipeline, 1990



Sources: U.S. Department of Education, NCES, Trends in Enrollment in Higher Education by Racial/Ethnic Category, Fall 1982 through Fall 1991; Cooperative Institutional Research Program, The American Freshmen National Norms for Fall 1990; Bureau of the Census, Current Population Reports; National Research Council, Doctorate Records File, various years.

American men enrolled in higher education, topping the previous high of 485,000 in 1990. Overall, the increase among men since 1988 has dramatically reversed a trend of lower enrollments evident in the early to mid-1980s.

As a group, African Americans also experienced their largest gains at two-year rather than four-year institutions from 1990 to 1991. The 10.3 percent gain at two-year institutions was more than double the 4.8 percent recorded at four-year colleges and universities (Table 4). This finding was in direct contrast to the trend from 1988 to 1990, when African Americans made the largest gains at four-year colleges. With African Americans relying more on two-year institutions from 1990 to 1991, it is not surprising that they recorded larger gains at public institutions than at independent colleges during this period (Table 5).

African Americans achieved increases of 6 percent to 7.1 percent at undergraduate, graduate, and professional institutions from 1990 to 1991 (Table 6). However, the 7.1 percent increase at the undergraduate level and the 6 percent gain at graduate institutions were the lowest recorded among the four ethnic minority groups. The 6.3 percent gain in professional enrollments trailed the rate of increase for Asian Americans but surpassed the largely unchanged rates for Hispanics and American Indians.

African Americans also recorded a 3.1 percent gain in enrollments at HBCUs from 1990 to 1991 (Table 7). Yet this figure trailed the 7.8 percent gain achieved by African Americans at non-HBCUs during the period. These data indicate a slowing in the trend of the mid- to late 1980s, when African Americans showed more than twice as much growth at HBCUs than at other colleges.[5] The *1991 Minority Status Report* provided the first glimpse of this change, when data showed that the rate of increase for African Americans was nearly identical at HBCUs and non-HBCUs from 1988 to 1990.

Men and women both experienced slight gains in enrollment at HBCUs from 1990 to 1991. For men, the 3.8 percent increase for 1990-1991 included a 5.4 percent gain at public HBCUs, while enrollments at independent HBCUs remained largely unchanged (Table 8). Overall, women posted a 2.6 percent gain at HBCUs from 1990 to 1991, as enrollments at public HBCUs increased 4.5 percent, but showed a 1.7 percent decline at independent HBCUs. In 1991, HBCUs enrolled 16 percent of all African American college students, down slightly from nearly 17 percent in 1990.[6]

Hispanics

Despite unprecedented population growth during the 1980s, Hispanics have recorded only mixed gains in American education. As documented earlier in this report, their high school graduation rates remain low; yet those who complete high school have enrolled in college in steadily higher numbers. From 1990 to 1991, Hispanics continued this college enrollment trend, as they recorded a 10.7 percent gain in total enrollment during the period (Table 4). Hispanic men and women experienced nearly identical gains of 10.5 percent and 11 percent, respectively (Table 5).

Similar to the trend for African Americans, Hispanics achieved their largest gains at two-year institutions from 1990 to 1991. Overall, the data show gains of 14.2 percent at two-year colleges, more than double the 7 percent gain recorded at four-year institutions (Table 4). This was in direct contrast to the trend from 1988 to 1990 noted in the *1991 Minority Status Report*, when Hispanic enrollment increased 16.2 percent at four-year colleges and 7.8 percent at two-year institutions. In 1991, 55.8 percent of all Hispanic students were enrolled at two-year institutions, the largest percentage among the four ethnic minority groups.

Most Hispanic students attend public colleges and universities (Table 5), although independent institutions showed a larger percentage gain from 1990 to 1991 (12.6 percent). Overall, Hispanic enrollment at independent schools increased 34.4 percent from 1988 to 1991. By comparison, Hispanic enrollment at public colleges and universities showed increases of 10.6 percent from 1990 to 1991 and 26 percent since 1988.

Hispanics achieved moderate gains in undergraduate and graduate enrollments from 1990 to 1991. At the undergraduate level, the increase amounted to 10.9 percent, compared with 8.5 percent at the graduate level (Table 6). Hispanic students did not record any change in professional institution enrollments during the period.

Asian Americans

Asian Americans experienced large gains in enrollment during the 1980s, a trend directly tied to the steady growth in the Asian American population in the United States during this period. Yet data for 1990 to 1991 show a total enrollment increase of 11.2 percent, another indication that the large increases of the 1980s may give way to more moderate gains in the future (Table 4). As noted in the *1991 Minority Status Report*, Asian Americans also recorded enrollment gains from 1988 to 1990 that trailed growth levels from earlier in the decade.

Similar to the trend for other ethnic minorities, Asian Americans showed larger increases at two-year than at four-year institutions from 1990 to 1991. Overall, Asian American enrollment increased 19.1 percent at two-year institutions during this period, compared with a 6.7 percent gain at four-year institutions. Again, these figures represent a break with the recent past, when Asian students recorded much stronger gains at the four-year level. For example, Asian Americans experienced a 15.5 percent increase at four-year institutions from 1988 to

1990, compared with only 6.5 percent at two-year campuses.

Consistent with this trend toward higher enrollments at two-year institutions, Asian students also showed greater reliance on public institutions in the 1990-91 period. Asian Americans recorded an 11.9 percent gain at public institutions, compared with an 8 percent increase at independent institutions (Table 5). These figures represent a change from the 1988-90 period, when independent institutions recorded a 21 percent growth in Asian students and public institutions showed a 12 percent gain.

Asian American women slightly outgained men during the 1990-91 period, although the gains were similar. Overall, Asian women recorded a 12.2 percent increase, compared with a 10.2 percent gain for Asian American men. Asian students achieved their greatest increase—11.6 percent—at the undergraduate level (Table 6). But they also posted a 9.4 percent gain at graduate institutions and a 10.5 percent increase at professional institutions. The professional institution gain was the largest among the four ethnic minority groups, though their overall enrollment numbers remain small.

American Indians

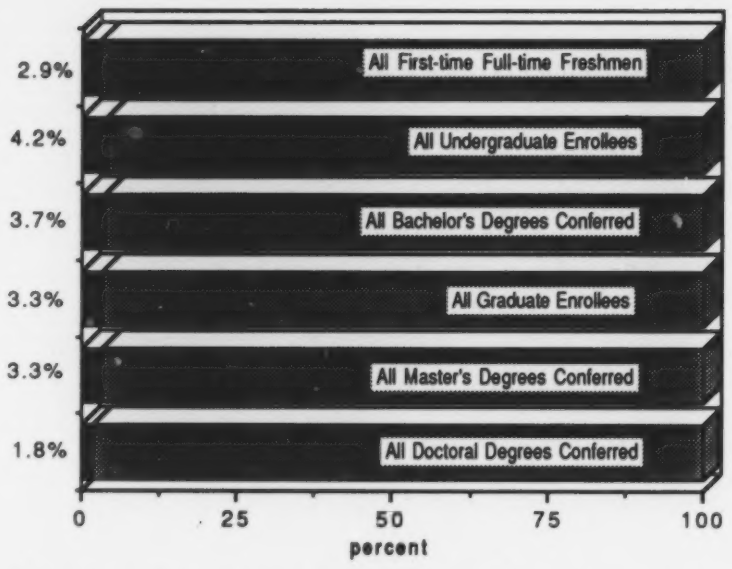
American Indians and Alaskan Natives experienced moderate growth in higher education enrollments from 1990 to 1991, although they continued to represent less than 1 percent of all students (Table 4). The 10.7 percent increase registered during the period pushed total American Indian enrollment to 114,000. Since 1986, the number of American Indians enrolled in higher education has increased by 26.6 percent.

Much of the 1990-91 progress occurred at two-year institutions, where American Indians recorded a 14.5 percent increase. By comparison, four-year campuses showed a smaller enrollment increase of 6.3 percent. These figures represented a break with general trends during the 1980s, when American Indians achieved their greatest gains at four-year colleges and universities. From 1980 to 1990, American Indians recorded a 29.7 percent increase at four-year colleges and universities, compared with a 17 percent gain at two-year institutions.

American Indians also showed slightly more progress at the graduate level than at the undergraduate level, another break with recent trends. From 1990 to 1991, enrollments were up 16.7 percent at graduate institutions, compared with an 11.6 percent gain at the undergraduate level (Table 6). As noted in the *1991 Minority Status Report*, American Indians experienced a 10.5 percent gain at the undergraduate level and no appreciable change at graduate institutions from 1988 to 1990. American Indian enrollments in professional institutions were unchanged from 1990 to 1991, and they continued to represent only a tiny fraction of the total at these institutions.

Elsewhere, the NCES data show similar enrollment gains for American Indian men and women from 1990 to 1991. Men recorded an 11.6 percent increase, compared with a 10 percent gain among women (Table 5). The statistics also report a 16.7 percent increase for American Indians at independent institutions, which was slightly higher than the 11.1 percent gain recorded at public colleges and universities (Table 6).

Figure 4
American Indians in the Education Pipeline, 1990



Sources: U.S. Department of Education, NCES, *Trends in Enrollment in Higher Education by Racial/Ethnic Category: Fall 1982 through Fall 1991*; Cooperative Institutional Research Program, *The American Freshmen National Norms for Fall 1992*; National Research Council, Doctorate Records File, various years.
Note: The scale for this figure is based on 25 percent. Data are not available on the number of 18 to 24 year-old American Indians.

Degrees Conferred

Students of color achieved some important gains in degrees awarded during the late 1980s. Yet this progress varied considerably for different ethnic minority groups. For example, African Americans experienced moderate gains from 1987 to 1989 in associate's, bachelor's, and master's degrees, reversing a long downward slide that began in the late 1970s. However, in 1989 the number of degrees awarded to African Americans remained below the number of degrees awarded during the mid-1970s at the bachelor's and master's levels. By comparison, Hispanics achieved a 10.4 percent gain at the baccalaureate level and a 3.2 percent increase at the master's level from 1987 to 1989, reflecting continued growth since 1981.

From 1987 to 1989, Asian Americans also reported strong growth of 17.2 percent in bachelor's degrees and 25.2 percent in master's degrees, again part of a dramatic increase in degrees conferred since 1981. American Indians have showed only slight growth at the bachelor's degree level since 1981, but larger increases in the number of master's and first professional degrees.

This year's status report will update these data with information on associate's, bachelor's, master's, and first professional degrees for 1989-90. It also will update information about bachelor's and master's degrees by major academic field for 1989-90. Data for associate's, bachelor's, master's and first professional degrees come from NCES. The National Research Council has supplied the information on doctoral degrees.

General Trends

Students of color recorded small gains at almost all degree levels from 1989 to 1990. At the associate's degree level, minorities showed a 5 percent increase, including a 4.1 percent gain for minority men and a 5.5 percent gain for minority women (Table 9). By comparison, whites registered a 3.9 percent increase at the associate's degree level, which consisted of a 2.2 percent gain for men and a 5 percent gain for women. Nonetheless, the overall proportion of minorities remained generally unchanged at the associate's degree level, at about 15 percent of all degrees conferred.

Minorities showed slightly higher increases at the baccalaureate level, with total gains of 5.8 percent from 1989 to 1990 (Table 10). Minority women led the way with a 7.3 percent increase, compared with a 4 percent gain for men. Overall, the total gain for minorities was more than twice the increase for white students at the baccalaureate level during this period. Students of color also slightly increased their proportion of total bachelor's degrees during this period, from 12.8 percent to 13.1 percent.

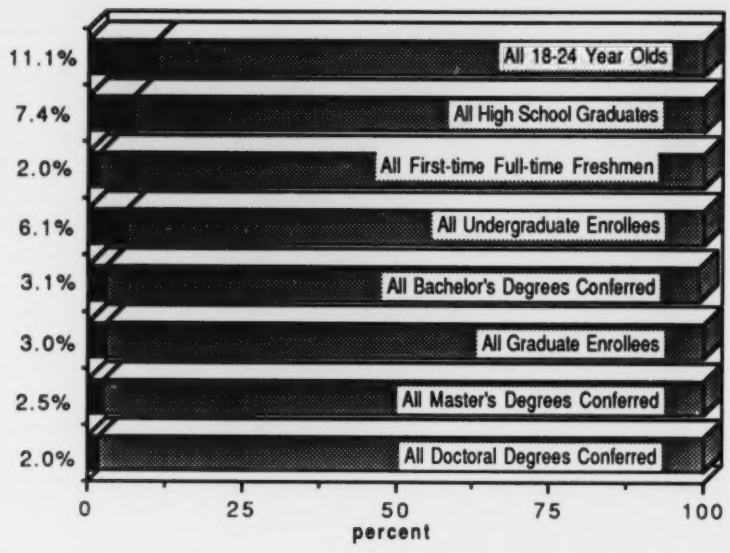
Minority women again showed the greatest gains at the master's degree level with a 9.1 percent increase (Table 11). Men experienced a smaller increase of 3.8 percent during the period, making the total minority increase 6.7 percent for the year. This rate was slightly above the 4.1 percent gain experienced by whites from 1989 to 1990, but the share of master's degrees for minorities—compared with the rest of the student population—did not change markedly.

At the first professional level, degrees among students of color rose 9.5 percent—the largest gain among the four degree categories (Table 12). Again, women of color led the way with a 14.9 percent increase from 1989 to 1990. The rate for men also rose 5.5 percent. By comparison, whites lost ground at the first professional level from 1989 to 1990, with a 1.5 percent decrease in degrees. In this case, white men accounted for the loss with a decline of 3.8 percent, which overshadowed a 2.6 percent increase for white females. Overall, these changes enabled students of color to achieve a slight increase in their share of first professional degrees among the student population, from 12.1 percent of total degrees in 1989 to 13.3 percent in 1990.

African Americans

African Americans experienced their largest gain at the master's degree level from 1989 to 1990. The number of master's degrees for African Americans rose 8.8 percent, including increases of 10.3 percent for women and 6.1 percent for men. Overall, however, African Americans continued to represent slightly less than 5 percent of all master's degrees awarded nationwide in 1990.

Figure 5
Hispanics in the Education Pipeline, 1990



Sources: U.S. Department of Education, NCES, *Trends in Enrollment in Higher Education by Racial/Ethnic Category: Fall 1982 through Fall 1991*; Cooperative Institutional Research Program, *The American Freshmen National Norms for Fall 1990*; Bureau of the Census, *Current Population Reports*; National Research Council, Doctorate Records File, various years.

At the first professional level, African Americans also recorded a solid 7.7 percent increase from 1989 to 1990, a gain second only to Asian Americans among the four ethnic minority groups. Again, gains were most evident among African American women, as they achieved a 13.7 percent increase compared to progress of only 2 percent among African American men. As in the master's degree category, however, African Americans continued to earn less than 5 percent of all first professional degrees awarded in 1990.

The number of bachelor's degrees conferred on African Americans increased 5.2 percent from 1989 to 1990, including gains of 4.1 percent among men and 5.9 percent among women. Overall, African Americans received just under 6 percent of all baccalaureate degrees awarded in 1990. At the associate's level, African Americans posted their smallest increase among the four degree categories—1.6 percent. Only in this category did African American men show more improvement than African American women, although both experienced only small gains. Nationwide, African Americans represented 7.9 percent of all associate degree recipients in 1990, basically unchanged from 1989.

Hispanics

Hispanics continued to record consistent growth at all levels of higher education from 1989 to 1990, as evidenced by total degrees conferred. At the bachelor's level, Hispanics built on their earlier progress during the decade with a 9.3 percent increase, which was larger than the gains by Asian Americans and African Americans. Similar to other ethnic minorities, the gains among Hispanics were greater for women (11.6 percent) than for men (6.6 percent). Hispanics accounted for 2.5 percent of all master's degrees in 1990, approximately the same share (2.2 percent) they held in 1981.

In master's degrees, Hispanics experienced a growth of 8.6 percent, nearly identical to the increase for African Americans and more than twice the level of gain for Asian Americans. For Hispanics, the number of women earning degrees rose by 9.7 percent, while men showed a gain of 7.2 percent. But the proportion of Hispanics among degree recipients remained largely unchanged, at 2.5 percent.

Hispanics also reported an increase of 7 percent in first professional degrees from 1988-89 to 1989-90, including a 5.8 percent gain for men and an 8.7 percent increase for women. Since 1987, the number of Hispanics receiving first professional degrees has increased by 18 percent. At the associate's level, the number of Hispanics awarded degrees rose by 8.2 percent from 1989 to 1990 as men registered a 6.5 percent gain and women a 9.7 percent increase. Since 1987, the number of Hispanics receiving an associate's degree has risen by 16 percent.

Asian Americans

The rapid growth in the number of degrees awarded to Asian Americans continued in the 1989-90 academic year, although the large increases of the early 1980s appear to have leveled off. The most recent data also show that growth is evident primarily among women. This trend was most apparent at the associate's degree level, where a 7.1 percent increase among Asian American students consisted of a 13 percent gain for Asian American women but only a 1.5 percent gain for Asian American men. These latest trends mean that the number of associate's degrees awarded to Asian American women has increased 57 percent since 1985. By comparison, the rate of increase among Asian American men was 18 percent during that period.

At the bachelor's level, degrees awarded to Asian Americans rose 3.6 percent from 1989 to 1990, with gains among women accounting for most of the increase. It is noteworthy that this 3.6 percent gain is the smallest among all four ethnic minorities at this level, providing further evidence that the large increases for Asian Americans during most of the 1980s may have peaked.

Asian Americans reported a 3 percent gain in the number of master's degrees conferred from 1989 to 1990. Again,

this rate of increase trailed percentage gains for Hispanics and African Americans but surpassed American Indians. Asian American women represented nearly all of the increase, with a gain of 6.8 percent, while Asian American men recorded only minimal progress.

At the first professional level, Asian American students showed a solid gain of 12.1 percent from 1989 to 1990—by far the largest increase among the four ethnic minorities. This increase is consistent with many of the earlier 1980s trends in degree attainment for Asian Americans. Women showed progress of 18.4 percent for this one-year period, compared with 8.1 percent for men. Overall, the number of first professional degrees awarded to Asian Americans increased 84 percent from 1985 to 1990.

American Indians

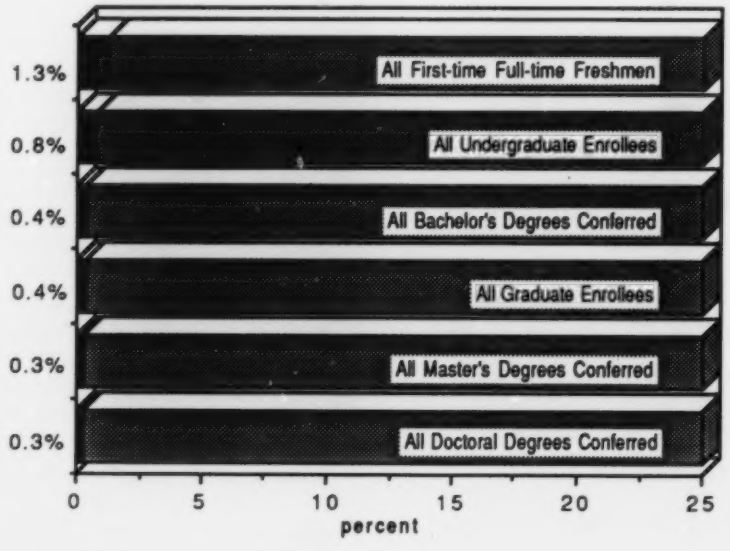
American Indians continue to represent only a small share of the total number of students earning degrees at all levels. Despite achieving several small percentage increases from 1989 to 1990, they remain only a tiny proportion of the overall degree-seeking student population at all levels of higher education.

On a percentage basis, American Indians had their greatest gain at the baccalaureate level from 1989 to 1990. Their 9.7 percent gain actually was the best among all four ethnic minority groups, and it included a 12.9 percent increase for American Indian women and a 5.6 percent increase for American Indian men. However, these students still continue to represent far less than 1 percent of the total number of students earning bachelor's degrees.

At the associate's level, the number of American Indians earning degrees increased by 5.7 percent, including gains of 8.4 percent for men and 3.9 percent for women. The increase among American Indian men was the greatest among any ethnic minority males. The data for master's degrees show a different picture, however. Here the number of American Indian men earning degrees in 1990 fell by 2.3 percent—while other ethnic minority groups showed an increase for men. American Indian women also experienced a 5.4 percent gain, enabling American Indians to show slight progress from 1989 to 1990.

The number of American Indians receiving first professional degrees remained abysmally low in 1990, at fewer than 300. These students included 138 men (a 6.8 percent decline from 1989) and 119 women (a 2.6 percent increase). Overall, the number of American Indians earning first professional degrees dropped 2.7 percent in 1990.

Figure 6
Asian Americans in the Education Pipeline, 1990



Note: Data are not available on the number of 18 to 24 year old Asian Americans.
Sources: U.S. Department of Education, NCES, Trends in Enrollment in Higher Education by Racial/Ethnic Category: Fall 1982 through Fall 1991; Cooperative Institutional Research Program, The American Freshmen National Norms for Fall 1990; National Research Council, Doctorate Records File, various years.

Degrees Conferred By Field

The *1991 Minority Status Report* examined some important gains made by students of color in six major fields, including education and social sciences—two areas that had experienced a steady decline in degrees awarded during the late 1970s and early 1980s. From 1987 to 1989, data showed a 19 percent gain in baccalaureate social science degrees, reversing a downward trend earlier in the 1980s. The increase in education degrees was a small 2.1 percent, yet this represented an upturn from the steep declines for previous years. By comparison, students of color achieved only a slight 1.2 percent gain in baccalaureate engineering degrees from 1987 to 1989—despite much stronger gains before this period.

Minorities also showed some progress from 1987 to 1989 in earning master's degrees, partly because of gains achieved by Asian Americans. This was most evident in engineering, where a 10.4 percent gain was achieved only because of more degrees awarded to Asian American students. But minorities also recorded a 16.3 percent gain in the number of business degrees as all ethnic minority groups showed progress.

This year's report will update information on degrees awarded by field to reflect changes that occurred from 1989 to 1990. Information is taken from the NCES.

Photo credit: Jennifer Bishop, Western Maryland College

General Trends

At the bachelor's level, students of color showed gains in all six major degree fields from 1989 to 1990, led by a 10.2 percent increase in the social sciences (Table 13). These figures demonstrate that students are beginning to return to the social sciences in larger numbers; in fact, the 1989-90 increase represents nearly half of the total percentage gain achieved in this field from 1981 to 1990. The most recent gains were split nearly evenly between men and women.

Health professions ranked next at the bachelor's level, with an 8.5 percent increase from 1989 to 1990. Gains for women slightly outpaced those of men, a reversal of earlier trends from the 1980s. Overall, the number of minorities receiving health profession degrees increased 26.6 percent from 1981 to 1990. The number of bachelor's degrees awarded to students of color in the life sciences showed a gain of 7.6 percent from 1989 to 1990, led primarily by a 10.6 percent increase among women. Nationwide, the number of minorities earning life science degrees increased 34.6 percent from 1981 to 1990.

Engineering showed much slower growth at the bachelor's level from 1989 to 1990 compared with earlier trends. The number of minorities earn-

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ing engineering bachelor's degrees increased 82 percent from 1981 to 1990—but only 1.2 percent of this gain was achieved from 1989 to 1990. Nonetheless, the share of minorities earning bachelor's degrees in engineering increased from 9.5 percent in 1981 to 15.8 percent in 1990. In business, students of color earned 45.1 percent more bachelor's degrees from 1981 to 1990. However, a gain of only 3.8 percent occurred from 1989 to 1990.

At the master's level, social sciences again had the largest increase—15.1 percent from 1989 to 1990 (Table 14). This growth represented a major shift among minority students, since the number earning these degrees still showed a net loss for the 1980s of nearly 1 percent. Women accounted for much of the recent gains, posting a 21.2 percent increase from 1989 to 1990.

In both health professions and public affairs, gains achieved by minorities from 1989 to 1990 accounted for much of the total growth in these fields for the entire decade. In public affairs, minorities showed a slight net loss before 1989; yet the 7.8 percent gain from 1989 onward produced a 7.4 percent increase for the decade. In the health professions, minorities experienced an 11.3 percent gain at the master's level from 1989 to 1990, pushing the total increase for the decade to 28 percent.

Education and business degrees showed growth of 7.9 percent and 5.5 percent, respectively, among minorities from 1989 to 1990. In education, these gains helped reduce an overall loss for the decade; in business, the gains were largely in step with master's degree trends through the 1980s. Engineering made a sharp break with the past, however, posting a 2.1 percent decline at the master's level from 1989 to 1990. Overall, minorities showed a 79 percent gain in engineering degrees at this level for the 1981-90 period.

African Americans

In keeping with the trends cited earlier, African Americans showed their greatest bachelor's degree increase in social sciences from 1989 to 1990 (Table 13). Overall, African Americans recorded a gain of 9.6 percent from 1989 to 1990 as they reversed a downward trend from earlier in the decade. Nonetheless, African Americans still experienced a loss of 12.1 percent from 1981 to 1990 in social science baccalaureate degrees. African American women slightly outgained African American men during the 1989-90 period, while African American men experienced larger losses for the entire 1981-90 period.

African Americans showed a 3.4 percent gain in education between 1989 and 1990. This increase, though modest, does provide further evidence that the lengthy decline in education degrees for African Americans may have reached an end. Overall, however, the number of education bachelor's degrees was down 53.8 percent from 1981 to 1990.

African Americans also experienced small gains of 4 percent to 5.4 percent in bachelor's degrees awarded in business, health professions, and life sciences for the 1989-90 period. Only in business, however, were the gains evenly divided among men and women. Men showed a much stronger increase in the health professions, while a sizable gain for women in life sciences was enough to overcome a net loss among African American men for this period. Overall, the total number of bachelor's degrees in business and health professions increased from 1981 to 1990, while the number of degrees in biological/life sciences decreased.

At the master's level, African Americans showed increases in all six major fields of study from 1989 to 1990 even though they showed a net loss for the decade in education and social sciences (Table 14). The recent increases include 13.2 percent in social sciences and 11.8 percent in public affairs for 1989 to 1990. Other gains ranged from 5 percent to 9 percent. African American men and women both achieved progress in all categories, except for men in the health professions.

From 1981 to 1990, African Americans showed their most substantial gains (71.9 percent) in engineering. In public affairs, however, the 1989-90 gains were substantial enough to show a modest gain for the decade, while the increases in education and social sciences reduced the overall losses in master's degrees in both categories for 1981 to 1990.

Hispanics

From 1989 to 1990, Hispanics showed impressive gains in education and health profession degrees at the bachelor's level, with gains of 25.1 percent and 15.2 percent, respectively (Table 13). The increases in education enabled Hispanics to show a small net gain for the 1981-90 period, even though Hispanic men suffered a 14.7 percent loss for the decade. Gains among women from 1989 to 1990 accounted for the decade's Hispanic degree increase in this category. In the health professions, the gains were more evenly divided among men and women from 1989 to 1990. For the decade, Hispanics also showed a 39.6 percent gain in health profession degrees at the baccalaureate level.

The number of business and engineering degrees awarded to Hispanics showed major increases for the 1981-90 period, but little of this progress was due to gains realized from 1989 to 1990. The number of Hispanics earning engineering bachelor's degrees increased 5.8 percent from 1989 to 1990, while those earning business degrees increased 2.4 percent. A 1.5 percent loss among women in engineering from 1989 to 1990 was the only loss for Hispanics at the bachelor's level during this period.

At the master's level, Hispanics achieved gains in all categories but engineering from 1989 to 1990 (Table 14). Social sciences and education led the way with increases of 16.4 percent and 15.5 percent, respectively, followed by a 12.7 percent gain for the health professions. In education, the gains were fairly even among men and women, while women accounted for most of the social science increase.

Photo credit: Xavier University of Louisiana

Overall, public affairs and business showed single-digit increases at the master's level for the 1989-90 period, while engineering recorded a 3 percent decline.

For the decade, business and health profession degrees awarded to Hispanics showed the largest increases, but in business most of the progress was accomplished before 1989. Engineering also showed a large gain, despite the 1989-90 losses. The gains in master's degrees in education from 1989 to 1990 helped limit the overall degree loss for the decade to 10.6 percent.

Asian Americans

From 1989 to 1990, Asian American students continued to post small to moderate increases in most fields at the baccalaureate level, with one notable exception: education. In this category the number of students earning bachelor's degrees declined 15.8 percent from 1989 to 1990, including a 21 percent loss among women (Table 13). Nonetheless, Asian Americans still showed a net gain for 1981 to 1990 of 28.8 percent.

Elsewhere, life sciences had the largest increase from 1989 to 1990 (12.5 percent) followed by the health professions (10.1 percent). Women accounted for nearly all of the health profession gains and much of the increase in life sciences. Overall, the number of Asian American students earning life science degrees at the bachelor's level more than doubled from 1981 to 1990, while the number for health professions was up 43.4 percent.

Social sciences and business both showed single-digit increases for the 1989-90 period at the bachelor's level, while engineering remained largely unchanged. Nonetheless, Asian American students more than doubled the number of degrees conferred in all three categories from 1981 to 1990.

In master's degrees, Asian Americans showed their greatest gains in the social sciences (16.6 percent) and health professions (14.9 percent) from 1989 to 1990 (Table 14). Education and business showed single-digit gains while public affairs and engineering suffered declines of 7.6 percent and 4.1 percent, respectively. For the period 1981-90, however, all six subject fields showed gains for Asian American students at the master's level. Engineering and business ranked highest for the decade, even though they showed little or no growth from 1989 to 1990. By contrast, the 6.5 percent gain in education from 1989 to 1990 was enough to reverse a previous net decrease for the decade.

American Indians

As noted earlier, American Indians represent only a small fraction of the total number of students earning degrees at the baccalaureate and master's levels nationwide. From 1989 to 1990, they also showed only mixed progress, with the largest gains at the bachelor's degree level.

Similar to other ethnic minority groups, American Indians showed the greatest gains in social sciences (23.9 percent) and education (12.2 percent) at the bachelor's level from 1989 to 1990. Women made substantial gains of 21.5 percent in education and 28.4 percent in social sciences during this period. American Indian men had a 19.7 percent gain in social sciences but a 7.6 percent loss in education. In both categories, the gains from 1989 to 1990 made up for losses earlier in the 1980s and enabled American Indians to show a net increase for the 1981-90 period.

Elsewhere, American Indians also realized a 10 percent gain in the health professions from 1989 to 1990, as women accounted for all of this

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increase. But men helped fuel a 3.8 percent increase in bachelor's degrees in business from 1989 to 1990. American Indians lost ground, however, in life sciences and engineering from 1989 to 1990. Women showed steep declines in both categories, although men showed progress in science. Despite the engineering decline, American Indians still showed a small net gain for the 1981-90 period.

At the master's level, American Indians showed progress in education, business, health professions, and engineering, although only in the last category did gains exceed 10 percent from 1989 to 1990 (Table 14). Again, the actual number of degree recipients in these fields remained small. For example, only 9 women and 33 men received engineering master's degrees in 1990, and total student counts in public affairs, health professions, and social sciences remained under 100.

Doctoral Degrees

Data from the National Research Council for U.S. citizens indicate that American Indians and Asian Americans experienced the largest growth in doctorates awarded from 1990 to 1991 (Table 15). The same data show that African Americans registered a small increase and Hispanics experienced a slight decline for the year. Nationwide, the number of doctorates awarded to U.S. citizens was largely unchanged from 1990 to 1991.

Photo credit: Clemens Kalischer

Photo credit: Southern Illinois University, Carbondale

American Indians showed the largest percentage increase—33.3 percent—as they climbed from 96 total awards in 1990 to 128 in 1991. Within this group, men experienced a 40.4 percent increase and women a gain of 25 percent. The number of doctorates awarded to Asian Americans rose 19.1 percent, including a 36.9 percent increase among Asian American women.

African Americans achieved a 4 percent gain for this period, largely because of a 10 percent increase among men. This improvement showed that African Americans are beginning to reverse a lengthy downward trend in doctoral degrees during most of the 1980s. The 933 doctorates awarded to African Americans in 1991 was the largest number since 1984—but still nearly 100 behind the number of doctorates awarded in 1980. Overall, African Americans accounted for 3.8 percent of doctorates awarded to U.S. citizens in 1991, down slightly from 4 percent in 1981.

Hispanics registered a 1.4 percent decline from 1990 to 1991, which represented the only decrease among ethnic minority groups for this period. For Hispanics, a 5.3 percent loss among men overshadowed a 2.9 percent increase for women. For the entire 1981-91 period, however, Hispanics posted a 52.6 percent increase in doctorate awards.

The number of doctorates awarded to whites also declined from 1990 to 1991, in this case by 1.3 percent. White men recorded a 2.5 percent decline while doctorates awarded to white females remained steady. Non-U.S. citizens made a 9.2 percent gain in doctorates for the year, based in large part on an 18.1 percent increase among women.

Doctorates by Field

Among U.S. citizens, doctoral degrees declined slightly in education and social sciences, but increased in the humanities, physical sciences, and engineering from 1990 to 1991 (Table 16). The rate for life sciences was basically unchanged during the period. Among ethnic minorities, African Americans achieved gains of 16.4 percent in life sciences and 6.7 percent in social sciences from 1990 to 1991. They also achieved gains near or above 50 percent in both physical sciences and engineering, although they earned fewer than 50 doctoral degrees in each category. African Americans also suffered an 11.2 percent decline in doctoral degrees in education from 1990 to 1991 after showing a large gain from 1989 to 1990.

Hispanics posted few gains in doctoral degrees for the 1990-91 year, as only engineering and social sciences showed any increase. Hispanics recorded declines in life sciences, physical sciences, and education, while the number of doctoral degrees in the humanities was basically unchanged. In comparison, American Indians showed large percentage gains in many doctorate fields, but their numbers remained abysmally low. They doubled the number of life science doctorates from nine to 19 during the period and almost tripled the number of physical science doctorates from five in 1990 to 14 in 1991. American Indians earned their largest number of doctorates, 52, in education, up from 37 earned in 1990.

Asian Americans showed moderate increases in most doctorate fields from 1990 to 1991. These included gains of 28.8 percent in physical sciences, 17.8 percent in engineering, 20.8 percent in life sciences, and 25.7 percent in the humanities. Only social science doctorates showed a slight decline among Asian Americans during this period. In comparison, doctorates among white students were basically unchanged in most categories from 1990 to 1991, with the exception of slight declines in engineering and education.

Special Focus: State Enrollment Trends for Students of Color

Nationally, students of color have made enrollment gains in American higher education during the late 1980s and early 1990s. But recent state budget shortfalls have created a variety of different issues and challenges in many regions of the country that may affect student enrollments in the future. Because of these events, this year's special focus will look at state enrollment trends for the past decade—and examine how the recession may be affecting the college enrollments of African Americans, Hispanics, Asian Americans, and American Indians.

The first section of this analysis focuses on two-year and four-year enrollments as well as on enrollments of graduate and professional students, from 1980 to 1990. For this section, the report relies on U.S. Census Bureau population data as well as information from NCES on enrollments within the states. The 1990 state data were revised from previous NCES publications.[7] In the final section, the report analyzes the effects of the recession on college enrollments in eight states, with information taken from recent research studies and an informal canvassing of higher education officials conducted by OMHE.

Because this section is so brief, it does not provide an analysis of trends in every state for two-year and four-year institutions or for graduate and professional education. In addition, eight state analyses are limited in that they focus only on certain trends within states and are based on several interviews with state higher education officials as well as on statistical data.

This section focuses only on state trends and enrollments and therefore does not evaluate the effects of federal policy changes during the past decade. Nevertheless, such changes have substantially altered the face of American higher education. For instance, funding for many federal student aid programs has failed to keep pace with inflation. In 1990 dollars, the value of an average Pell Grant has declined by

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nearly one-fifth since 1975, while the value of college work-study earnings has fallen by more than half since the early 1970s.[8] In addition, Congress in 1992 reduced the maximum Pell Grant by $100 because of budget constraints. During this time frame, student loan volume has increased dramatically, from $1.3 billion in fiscal year 1971 to $15 billion by fiscal year 1992.[9] Such changes in federal policy, combined with the difficult economic times in many states, serve only to create new potential obstacles for students of color in the 1990s.

Total Enrollment Trends

Nationwide, students of color made up a larger share of total enrollments in 1990 than in 1980. Demographic changes within the U.S. population resulted in increased numbers of Hispanic, African American, American Indian, and Asian American students in higher education. Hispanics recorded a 65.8 percent enrollment gain for the decade, while American Indians achieved a 22.6 percent gain and African Americans a 12.6 percent increase. Total enrollment of Asian Americans doubled during the decade. By comparison, the rate of increase for white students was a much smaller 9 percent (Table 4). At first glance, the college enrollment growth among minorities during this decade seems impressive. However, this upsurge in the number of minorities enrolled in college is reflective of their general population growth.

In fact, enrollment gains lag far behind actual population increases for some ethnic minorities during the 1980s. For the ten-year period ending in 1990, the Hispanic population in the U.S. increased 53 percent, the American Indian population rose 37.9 percent, and the African American population grew by 13.2 percent.[10] The Asian American population more than doubled during the decade, while the population for whites increased by 9.8 percent.

In analyzing data that compare 1990 enrollments with 1991 enrollments, it is clear that some states—including those with large numbers of ethnic minorities—were making progress in enrollment despite the recession. But some of these states also have further reduced funding for higher education in 1992, a trend that in some cases has resulted in higher tuition costs and reduced enrollments. Other surveys have reported similar findings. In a separate December 1992 ACE survey, seven of 19 states reported lower total enrollments for fall 1992 than for fall 1991. Of these seven, five provided less money for higher education in fall 1992 than two years ago, and a sixth provided the same level of funding.[11]

A canvassing of higher education officials in eight states conducted by OMHE found that states are implementing other policies to control growth in higher education. Several are utilizing enrollment caps or enrollment "management" programs. Still other states are focusing more of their limited resources on two-year institutions, which will help increase enrollments in this sector but could affect the future pipeline of minority professionals, since the two-year/four-year transfer rate for minorities remains especially low.

State Enrollment Trends, 1980 to 1990

Most states showed significant gains in total enrollment of students at two-year and four-year institutions from 1980 to 1990 (Table 17). Only the state of Washington and the District of Columbia reported declines in total enrollment for the period. In Washington state, there was a 23 percent enrollment drop at two-year institutions that resulted in an overall 13 percent decline in total enrollment in the state. The District of Columbia also experienced a 7.5 percent total enrollment decrease for the decade; this loss was based entirely at four-year colleges and universities because the district has no two-year institutions. California was the only other state to report a loss (6 percent) in enrollment at two-year colleges during the 1980s.[12] Elsewhere, gains at the two-year level often accounted for the most significant enrollment progress for states.

Nationwide, more than 30 states reported larger increases at two-year colleges than at baccalaureate institutions for the 1980-90 period. States reporting increases of more than 50 percent at two-year institutions included Alabama, Colorado, Florida, Kansas, Kentucky, Louisiana, Minnesota, Nebraska, Nevada, New Hampshire, New Mexico, South Dakota, Utah, Vermont, and Wyoming. By comparison, only Alaska and Nevada reported a total enrollment gain of more than 50 percent at the baccalaureate level.[13]

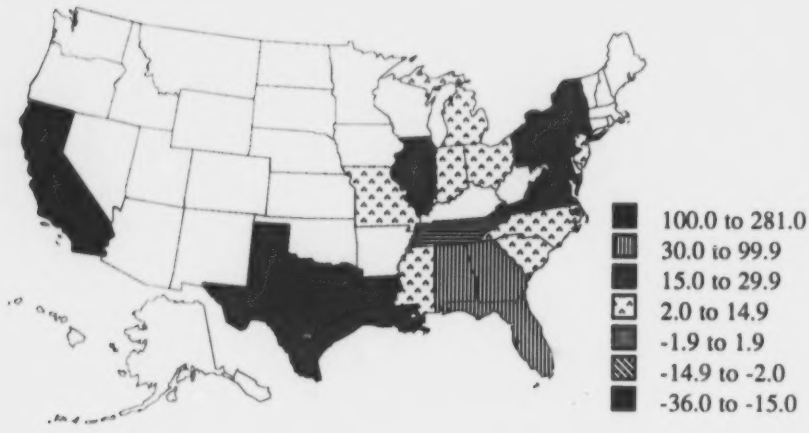
Other major population states generally showed progress at both two-year and four-year institutions for the period. Florida experienced two-year and four-year increases of 51.1 percent and 34.9 percent, respectively, while Texas achieved gains of 45.3 percent in two-year colleges and 18.1 percent at baccalaureate institutions. Large population states of the Northeast and Midwest experienced smaller enrollment gains. For example, New York experienced an 8.5 percent enrollment increase at four-year colleges and universities but virtually no growth at two-year institutions. Conversely, New Jersey recorded an 11.8 percent gain at two-year colleges but a 5.2 percent decline at four-year colleges. Illinois showed a gain of 17.3 percent at two-year institutions and an increase of 9.4 percent at baccalaureate institutions.

Despite these general enrollment trends during the 1980s, both population and enrollment figures show considerable differences on a state-by-state basis for specific ethnic minority groups. These trends are detailed in the following sections.

African Americans

During the 1980s, the number of African Americans enrolled in higher education declined during the first half of the decade (1980 through 1984),

Figure 7
Change in African American Enrollment in the Top 20 African American Population States, 1980 to 1990.



Source: 1992 Eleventh Annual Status Report on Minorities in Higher Education, Table 18.

held relatively steady during the mid-1980s, and grew at a modest rate from 1986 to 1990. As detailed in the *1991 Minority Status Report*, African American men in particular showed considerable gains from 1988 to 1990, reversing a downward trend during the previous eight years. Overall, from 1980 to 1990, African American enrollments at two-year colleges grew by 11 percent, and at four-year colleges by 14 percent. By comparison, the total African American population in the United States increased by 11.7 percent during this decade. Despite the small to moderate enrollment gain experienced by most states, African Americans continue to be underrepresented in two- and four-year college enrollments, compared with African American representation in the larger population of these states (Table 18).

An analysis of state enrollment trends for African Americans shows larger increases at two-year colleges than at baccalaureate institutions (Table 4). Although most states and regions recorded small to moderate gains in African American enrollment in two-year colleges, the progress in total enrollment outpaced these increases; consequently, the overall representation of African Americans in community colleges did not change, and in some states actually declined. Likewise, at four-year institutions, most states recorded modest to moderate increases in numbers of African American students, but this did not raise African Americans' enrollment share (Table 4).

States with the largest numbers of African American students were those in the South,[14] and large population states such as New York, California, Texas, and Illinois. Overall, most southern states experienced moderate gains in African American enrollment during the 1980s in both two-year and four-year colleges (Table 18). Other states showed mixed results. States showing declines or little gain in African American enrollment at four-year institutions include California, Kansas, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, Ohio, Pennsylvania, South Dakota, and West Virginia. The District of Columbia also experienced a drop in African American four-year enrollments. Two-year African American enrollment declined in only seven states: California, Indiana, Maine, Michigan, Nevada, South Carolina, and Tennessee.

California, the state with the second largest African American population, differed from all other western states in its losses in the number of African Americans attending both two-year and four-year institutions. From 1980 to 1990, African American community college enrollment fell 23.6 percent, from 104,383 to 79,712;[15] the proportion of African Americans among two-year college students dropped from 9.2 percent to 7.5 percent. At four-year colleges and universities in the state, the numbers of African American students increased only 1.8 percent, from 38,017 (or 5.8 percent of all students) in 1980 to 38,690 (5.5 percent) in 1990. Combined, the state experienced a 16.9 percent drop in African American enrollment during the decade. This loss occurred despite a gain of 21.4 percent in the state's overall African American population.

Illinois, which ranks sixth in African American population, was one of several states (Connecticut, Florida, Illinois, Massachusetts, New York, and Pennsylvania) to show increases in both the number and proportion of African Americans at two-year institutions. In Illinois, the actual number of African Americans at two-year colleges increased by 34.4 percent for the decade and, by 1990, represented 14.5 percent of the two-year college population, up from 12.6 percent in 1980. The 14.5 percent enrollment figure for community colleges equals the proportion of African Americans among the state's population (14.8 percent). However, typical of many states, Illinois did not make progress at the four-year level. The number of African-Americans at four-year institutions increased by 7.5 percent, but their share of the state's total enrollment remained steady at 10 percent.

In the South, 14 of the region's 17 states made gains in total African

American enrollment as well as in African American population. African American enrollment gains in these states did not significantly increase the proportion of African Americans among the total student population. In Texas, for example, the number of African Americans at two-year institutions increased 37.5 percent during the decade. Yet the actual proportion of African Americans at two-year institutions hovered between 9.9 percent and 10.5 percent. At four-year institutions, African Americans recorded a 16.6 percent enrollment increase, but the proportion of African Americans at baccalaureate institutions was unchanged at around 8 percent.

Florida, which ranks fourth among states in African American population, showed a somewhat similar pattern. At the two-year level, the total enrollment gain of 51.1 percent was slightly higher than the 48.6 percent increase in the number of African Americans, which led to only a slight increase in the percentage of African Americans among the community college student population. Similarly, at four-year institutions, a 39 percent increase in African American enrollment did not lead to an increase in their proportional representation in this sector.

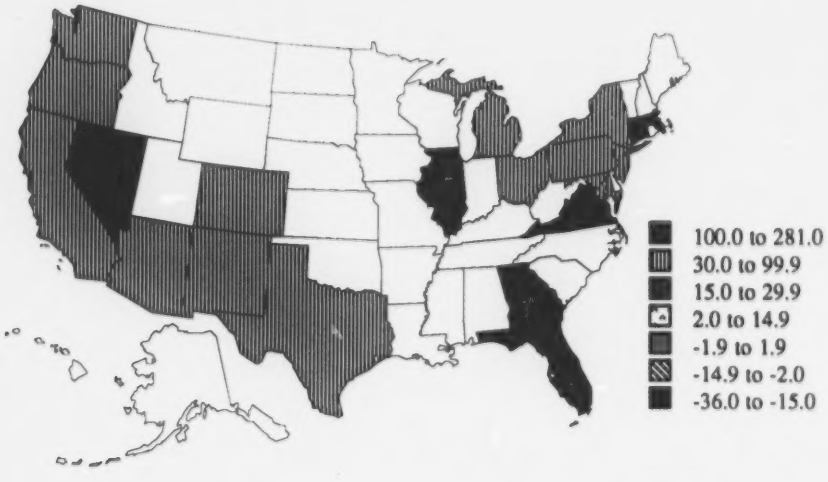
In Louisiana, an impressive growth of 66 percent for all community college enrollments dwarfed a 34.8 percent gain recorded by African Americans in these same institutions. Because of this larger gain, the proportion of African Americans actually declined from 32 percent to 26 percent at two-year institutions. By comparison, African Americans did show proportional gains at the four-year level (from 21.5 percent in 1980 to 23.7 percent in 1990), as their 24.6 percent increase surpassed a 12.8 percent gain in total enrollment. Despite these gains, African Americans remain severely underrepresented in Louisiana higher education, as they make up 31 percent of the state's population.

In Alabama, the state nearly doubled its enrollment of African Americans at two-year institutions from 1980 to 1990. Yet a much larger 143.1 percent gain in total enrollment occurred at this level, much of which may be the result of data collection improvements; nonetheless, the large total enrollment gain resulted in a decline in the proportion of African Americans among all students at two-year colleges.[16] While they accounted for nearly 24 percent of all two-year enrollments in 1980, by 1990 African Americans' representation dropped to 19.3 percent of two-year college students. A similar trend occurred at the four-year level, but to a much smaller degree. An 11.2 percent gain in the number of African Americans at baccalaureate institutions trailed an 18 percent total enrollment gain; as a result, African Americans' share of four-year enrollments fell 1 percent.

South Carolina reported a 7.3 percent drop in African American enrollment at the two-year level, which translated into a 7 percent drop in their representation in this sector. The state did show some enrollment gain at four-year colleges, yet a 19.2 percent enrollment increase did not result in any proportional gain in African American four-year enrollments.

Elsewhere, nine states showed a population increase for African Americans during the decade but a decline in African American enrollments at four-year colleges and universities. In addition to California, which was cited earlier, this included large Northeast and Midwest states such as New Jersey, Ohio, and Pennsylvania. In Ohio and Pennsylvania, the small losses experienced by African Americans were more striking because these states reported total enrollment gains at four-year institutions during the decade. In Ohio, African Americans recorded a 7.3 percent population gain in the state but a 1.3 percent decline in the number of students attending the state's four-year institutions. In contrast, between 1980 and 1990 total enrollment at the four-year level in Ohio increased by 14.5 percent.

Figure 8
Change in Hispanic Enrollment in the Top 20 Hispanic Population States, 1980 to 1990.



Source: 1992 Eleventh Annual Status Report on Minorities in Higher Education. Table 19

Hispanics

In 1990, Hispanic Americans grew to 9 percent of the U.S. population while representing 5.6 percent of higher education enrollments.[17] During the 1980s, most of the Hispanic population growth was concentrated in four states—California, Texas, New York, and Florida.[18] Hispanics in these states accounted for 5.4 million of the 7.7 million population gain during the 1980s.

Hispanics also are concentrated heavily in Illinois, New Jersey, Colorado, and Massachusetts as well as in the Southwestern states of Arizona and New Mexico.

Between 1980 and 1990, the ten largest Hispanic population states showed some enrollment growth for Hispanics despite their continued underrepresentation in higher education in these states (Table 19). Texas, a state with a large Mexican American population, recorded gains of 79.1 percent at two-year colleges and 67.4 percent at four-year institutions, both of which outpaced total enrollment growth in that state. Because of this progress, Hispanics in 1990 represented 19.9 percent of two-year enrollments in Texas, up from 16.2 percent a decade earlier. At four-year institutions, the proportion of Hispanics increased from 9.7 percent in 1980 to 13.8 percent by 1990. Despite these gains, however, Hispanics remain underrepresented in both sectors, since they account for 21 percent of the state's population.

California, the largest Census population state for Hispanics,[19] showed a similar trend. The state's Hispanic population, which is predominantly Mexican American, increased from 19.2 percent in 1980 to 25.8 percent in 1990. During the same decade, a 28.2 percent enrollment gain for Hispanics in two-year colleges (from 10.7 percent to 14.6 percent) translated into a 4-point increase in the percentage of Hispanics at these institutions. Likewise, a 68.2 percent gain for Hispanics in four-year colleges and universities surpassed total enrollment gains; as a result, Hispanics accounted for 11.1 percent of all four-year enrollments in 1990, up from 7.1 percent in 1980. As these figures show, Hispanics have experienced considerable enrollment growth yet continue to be greatly underrepresented on college campuses within the state.

New York ranks third in Hispanic population nationwide, and its enrollment pattern for the 1980s was much like California's. In New York, a 37.9 percent enrollment gain at the two-year level enabled Hispanics to increase their proportional representation from 6.7 percent in 1980 to 9.3 percent in 1990. Between 1980 and 1990, the state's Hispanic population also grew by 33.4 percent and Hispanics represented 12.3 percent of the state's residents in 1990. At the four-year level, Hispanic enrollment increased 55 percent, far outpacing total enrollment gain. As a consequence, Hispanics now represent 7 percent of four-year enrollments, up from 5 percent in 1980. Nonetheless, Hispanics remain underrepresented at the state's two-year and four-year institutions.

Among the four largest states for Hispanics, Florida, with its largely Cuban American population, came closest to matching Census proportions in Hispanic enrollment. From 1980 to 1990, Hispanics increased their share of state population from 8.8 percent to 12.2 percent, figures that are nearly identical to the gains they made at the state's two-year institutions. At these institutions, a 110.9 percent Hispanic increase exceeded total enrollment gains as Hispanics also increased their proportional representation from 8.9 percent to 14.7 percent. In addition, Hispanics nearly doubled their enrollments at four-year colleges and universities, enabling them to increase from 6.7 percent to 9.8 percent of the student population at this level.

Both Illinois and New Mexico experienced large Hispanic gains at two-year colleges, while making considerably less progress at four-year institutions. In Illinois, a fourfold enrollment gain meant that Hispanics in 1990 accounted for 9.8 percent of all students at two-year colleges, up from 2.4 percent in 1980. With this substantial gain, Hispanics showed a positive trend as they were enrolled at two-year institutions at rates above their 7.9 percent share of the state's population. In New Mexico, the state recorded a nearly fivefold gain in the number of Hispanics enrolled at two-year institutions. Hispanics increased their share of two-year enrollments from 21.4 percent to 29.9 percent. Still, Hispanics remained underrepresented in this sector, since they account for 38 percent of the state population. It should be noted that New Mexico reported significant gains in two-year college enrollments among all students because of fundamental changes in state policy. In the 1980s, one of the state's largest public vocational schools expanded its mission to include granting associate degrees; the state also implemented a policy of paying for remedial education courses only at two-year institutions.

As previously stated, neither New Mexico nor Illinois recorded such large increases in the four-year sector. However, in Illinois, a 65 percent gain at baccalaureate institutions did outpace general enrollment gains, though Hispanics increased their enrollment share only from 2.4 percent to 3.7 percent by 1990. In New Mexico, Hispanic enrollment grew by 7 percent at four-year institutions, leaving the Hispanic proportion largely unchanged at 25 percent of total four-year enrollment.

During the 1980s, Hispanics in Arizona made slightly larger proportional gains at four-year colleges and universities than at community colleges. At four-year institutions, Hispanic enrollment doubled, resulting in similar proportional gains, from 4.3 percent to 7.6 percent of all students. But Hispanics—who account for 18.8 percent of the state's population—still remained underrepresented at this level. Hispanics also recorded a 90.7 percent enrollment gain at two-year colleges. By 1990, Hispanics represented 13.9 percent of state enrollment at two-year institutions, compared with 10 percent a decade earlier.

Colorado and Massachusetts are two other states that rank among the top ten Census states in Hispanic population and that showed sizable enrollment gains from 1980 to 1990. Colorado more than doubled its enrollment of Hispanics at the two-year institutions and recorded a 74.6 percent gain at four-year colleges and universities. At community colleges, this gain resulted in Hispanics increasing their proportional representation from 8.1

Figure 9
Change in Asian American Enrollment in the Top 20 Asian Population States, 1980 to 1990.

Source: *1992 Eleventh Annual Status Report on Minorities in Higher Education*, Table 20.

percent in 1980 to 10.3 percent in 1990. At four-year schools, Hispanics accounted for 6.1 percent of enrollments in 1990, up slightly from 4.6 percent in 1980, while they represented 12.9 percent of the state's population. In Massachusetts, Hispanics represent 4.8 percent of all residents and accounted for 4.6 percent of two-year enrollments in 1990. The state achieved this gain largely through a threefold increase in Hispanic two-year enrollment during the decade. At the four-year level, Hispanics recorded an 83.3 percent increase, which was enough to raise their proportional share from 1.4 percent to 2.6 percent.

In New Jersey, which ranks sixth in total Hispanic population, Hispanic students recorded enrollment gains at both two-year and four-year institutions. This increase was consistent with Hispanic population growth in the state. From 1980 to 1990, a 79.1 percent increase in two-year enrollments helped Hispanics increase their proportional representation at these colleges from 4.8 percent to 7.6 percent. Similarly, a 43.5 percent enrollment gain on four-year campuses helped Hispanics make up 6.1 percent of all students in these institutions. By comparison, in 1990, Hispanics represented 9.6 percent of the state's population.

Asian Americans

The number of Asian Americans and Pacific Islanders in the United States doubled during the 1980s, a trend that had enormous ramifications for American higher education. Every state reported a Census increase in Asian American population, although about two-thirds of this growth occurred in only four states—California, New York, Texas, and Illinois. Keeping pace with this growth, most states reported large enrollment increases for Asian Americans from 1980 to 1990 (Table 20).

Overall, 36 states more than doubled their Asian American total enrollments, while at the same time 31 states doubled their Asian American population (Table 20). Unlike other ethnic minorities, Asian Americans made some of their largest enrollment gains at four-year colleges and universities. California, the state with the largest Asian American population, experienced 101.3 percent growth in Asian American enrollment at four-year institutions, compared with a 55.4 percent gain at two-year institutions. Because of the four-year gains, Asian Americans in 1990 made up 16.5 percent of California's total four-year college enrollment, up from 8.8 percent in 1980. At two-year colleges, Asian Americans accounted for 10.4 percent of all students in 1990, up from the 1980 figure of 6.3 percent. These gains were almost consistent with overall population growth for Asian Americans in California during the decade, where as of 1990 they composed 9.6 percent of the population.

New York reported a similar trend, as the state more than doubled Asian American enrollments at four-year institutions. With this gain, Asian American students represented 5.7 percent of all four-year college students in 1990, up from 2.7 percent in 1980. At two-year institutions, Asian Americans recorded a 109 percent increase, resulting in a proportional gain from 1.3 percent of the 1980 student enrollment to 2.8 percent in 1990. These increases were consistent with overall trends in the Asian American population in New York, which doubled during the 1980s.

But Hawaii, a key state for Asian Americans and Pacific Islanders, experienced only moderate enrollment increases in comparison with other states. At community colleges, Asian American/Pacific Islander enrollments increased 9.9 percent, which resulted in this group making up 77.2 percent of all two-year enrollments in 1990, up from 72.5 percent a decade earlier. At baccalaureate institutions, Asian American enrollment rose 10.6 percent, but this increase trailed the 24.4 percent gain made among the general student population. As a result, Asian Americans and Pacific Islanders accounted for 51.8 percent of all four-year students in 1990, down from 56.9 percent in 1980.

Among the top five Census states for Asian Americans, Texas showed the largest percentage growth in higher education enrollments. The state experienced a fourfold gain in Asian American enrollment at two-year institutions and nearly a similar increase at four-year campuses. With these gains, Asian Americans represented 3.4 percent of all four-year students and 2.7 percent of two-year enrollments in 1990, up from about 1 percent in 1980.

In most states, the percentage of Asian Americans enrolled in higher education is proportionate to or slightly larger than their representation in the state population. In Illinois, for example, Asian American students represented 3.8 percent of two-year enrollments and 5.1 percent of four-year enrollments in 1990, while they accounted for only 2.5 percent of the state's 1990 population. The same trend is evident in Washington, where Asian American students represented 4.9 percent of all two-year enrollments, 7.1 percent of all four-year enrollments, and 4.3 percent of the state's 1990 population. Asian Americans represented 9.6 percent of California's population, compared with 16.5 percent of four-year enrollments.

Elsewhere, Georgia experienced a fourfold increase for Asian Americans at baccalaureate institutions, numbers that far surpassed their community college and general population growth. However, Asians accounted for only about 2 percent of the state's four-year student population in 1990. Virginia, North Carolina, and Pennsylvania showed similar trends.

American Indians

American Indians increased their presence at colleges and universities—and in the general population—during the 1980s. Every state experienced at least a small gain in American Indian population, but states showed only mixed progress in improving enrollment of American Indian students (Table 21). Overall, American Indians continue to account for less than 1 percent of the U.S. population and of the total enrollment in higher education.

Top 1990 Census population states for American Indians and Alaskan Natives are Oklahoma, California, Arizona, New Mexico, and Alaska.

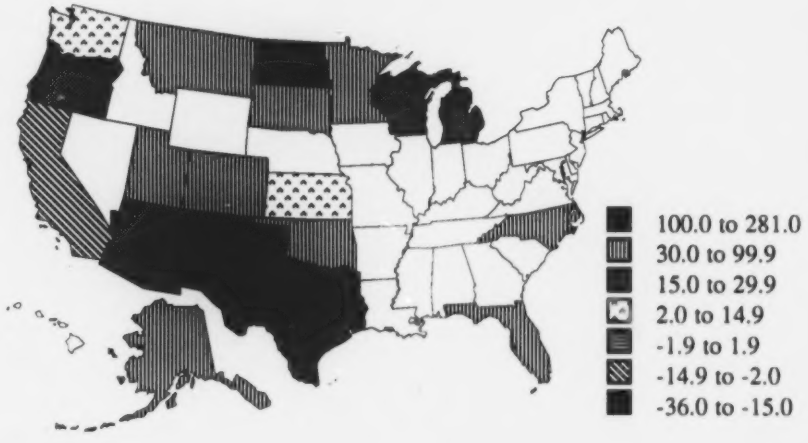
In analyzing enrollment changes in key states, Oklahoma showed enrollment increases for American Indians at both two-year and four-year institutions, but in both cases these numbers failed to match gains in total enrollment. For example, American Indians recorded a 75.3 percent gain at two-year institutions, but their share of total enrollment declined from 4.1 percent in 1980 to 2.4 percent in 1990. At four-year institutions, the number of American Indians increased by 54.5 percent from 1980 to 1990. Yet they accounted for only 1.5 percent of total enrollment at these institutions in 1990, down from 3.5 percent in 1980. At the same time, their representation in the state population increased from 5.6 percent to 8 percent.

In California, American Indians actually lost some ground in two-year enrollment, while making a modest gain at the four-year level. From 1980 to 1990, American Indians suffered an 11.4 percent enrollment decline at two-year institutions, with their share of higher education enrollments also declining slightly. At four-year schools, American Indians experienced a 7.1 percent gain. By 1990, their representation in four-year institutions (0.9 percent) approximated their share of the state population (0.8 percent), while their share of two-year enrollments was slightly larger, at 1.4 percent, despite the enrollment loss in this sector.

American Indians made some progress at both two-year and four-year institutions in Arizona during the 1980s. On two-year campuses, American Indian enrollment increased by 13.3 percent. However, this gain trailed the growth rate among the rest of the student population. At baccalaureate institutions, American Indians recorded a 77.3 percent gain from 1980 to 1990, which was enough to help them achieve a small increase in their enrollment share, from 1.4 percent to 2 percent. In comparison, they represented 5.6 percent of the state population in both 1980 and 1990.

In New Mexico, American Indians more than tripled their presence at the state's two-year colleges. But they did not realize a gain in their share of the total enrollment, largely because of the aforementioned changes in the state's two-year college system, which result-

Figure 10
Change in American Indian Enrollment in the Top 20 American Indian Population States, 1980 to 1990.



Source: *1992 Eleventh Annual Status Report on Minorities in Higher Education*, Table 21

ed in large enrollment increases at the state's two-year schools. At the four-year level, American Indians made a much smaller gain of 15.7 percent. In 1990, however, their share of the total population at baccalaureate institutions remained at only about 3 percent; their share of the total state population was 8.9 percent.

Alaska also underwent some restructuring of its higher education system, a move that affected the reporting of Alaskan Native enrollment in the state. The state absorbed its public two-year colleges into the University of Alaska system, which resulted in a drastic decline in reported two-year enrollments and large gains in reported four-year enrollments. Because of this structural change, the number of American Indians and Alaskan Natives reported attending two-year institutions dropped sharply from 1980 to 1990, while enrollment of these groups at four-year colleges and universities experienced a fourfold increase. Overall, Alaskan Natives represented 8.8 percent of the state's four-year student population in 1990, up from 7.4 percent in 1980. They represented 15.6 percent of the state's population in 1990.

Elsewhere, New York experienced a 36.1 percent decline in American Indian enrollment from 1980 to 1990. The enrollment of American Indians declined 37.2 percent at two-year institutions and 35.5 percent at four-year institutions. At the same time, the state's American Indian population increased by 58.3 percent. Washington, another relatively large population state for American Indians, experienced a 5.4 percent decline at the two-year level but showed a 26.2 percent gain at four-year institutions.

Texas, which ranks among the top ten Census population states for American Indians, experienced a 36.5 percent increase in American Indian two-year enrollments, but virtually no gain at four-year institutions. The American Indian population in Texas increased by a much larger rate of 64.4 percent from 1980 to 1990.

Among states with the largest American Indian populations, American Indians generally remained underrepresented in higher education based on their share of state population. In Oklahoma, for example, American Indians represented 8 percent of the population in 1990 but only 2.4 percent of two-year and 1.5 percent of four-year enrollments. In Arizona, American Indians accounted for 5.6 percent of the state population in 1990 but 4.3 percent of two-year and 2 percent of four-year enrollments.

The few exceptions to this trend can be linked to enrollment changes at tribally controlled colleges. For example, American Indians represented 32 percent of Montana's two-year college enrollments in 1990, with much of the American Indian enrollment in tribal colleges. By comparison, American Indians accounted for only 6 percent of the state's population and 2.9 percent of four-year enrollments in 1990. In North Dakota, American Indians represented 14.7 percent of two-year college enrollments in 1990, but only 1.6 percent of four-year college enrollments and 4.1 percent of the state's population.

In South Dakota, enrollment figures for American Indians were skewed because a major tribal college moved from two-year to four-year status during the decade.[20] As a result, American Indian enrollment at two-year institutions showed a 70.3 percent decline for the decade, while enrollment at four-year institutions increased by 91.2 percent. In 1990, American Indians represented 31.5 percent of all two-year college students in the state, down slightly from 1980. At four-year institutions, their share of the total student population increased from 3 percent in 1980 to 5 percent in 1990.

Elsewhere, from 1980 to 1990, 11 of 17 states in the South reported enrollment growth at both two-year and four-year institutions for American Indians. Alabama and Louisiana tripled American Indian enrollment at two-year colleges and doubled enrollment at four-year institutions. For both states, these enrollment gains far exceeded American Indian population increases. West Virginia was the only state in the region to report a decline in both enrollment categories, including a 47.2 percent drop at the two-year level. This dip occurred despite a 52.7 percent increase in the state's American Indian population during the decade.

Implications

Despite enrollment growth in states during the 1980s, African Americans, Hispanics, and American Indians continue to be underrepresented at the nation's two-year and four-year colleges and universities. In some states, these groups experienced numerical increases during the 1980s, while losing ground in their proportional enrollment shares. This trend is alarming not only because of its effect on students of color but also because of its potential impact on the economy and the nation. As shown on Table 3, 22 states are projected to report a drop in the number of African American public high school graduates by 1995, creating another potential barrier to progress for this group and its representation in college.[21]

Long-term economic and demographic trends also pose significant challenges. Data from the Center for Demographic Policy show that students of color will make up 24 percent of the under-18 population by 2010, a 5 percent increase from 1990. By 2010, youth of color will represent more than half of the population 18 years of age and younger in seven states, including California, Florida, Texas, and New York. In addition, states as diverse as Mississippi, New Jersey, and Illinois will have a youth population more than 40 percent minority. "In these and many other states, we will have to consider what we will call 'minorities' when they are more than half of our youth," writes Harold Hodgkinson, director of the Center for Demographic Policy at the Institute for Educational Leadership.[22]

Much of this increase can be attributed to the baby "boomlet" of the 1980s, Hodgkinson says, yet about half of this "boomlet" occurred in only three states—Florida, Texas, and

California, where the number of students of color is increasing dramatically. Hodgkinson also points out that with a larger number of children born into low-income households, a large portion of these "boomlet" youth face the prospect of childhood poverty and limited education opportunities during elementary and secondary school. As a consequence, many of these children may be at risk of school failure, and without adequate intervention and support, may not be prepared for college. "Thus the 'boomlet' may not guarantee more enrollments for higher education," asserts Hodgkinson.

Other national data also show the daunting problems facing today's children. Nationwide, nearly 20 percent of all youngsters under age 18 live in poverty, including 44.2 percent of African American children and 37.7 percent of Hispanic children.[23] In addition, 12.5 percent of all 16-to-24-year-olds were classified as high school dropouts in 1991, including 13.6 percent of African Americans and 35.3 percent of Hispanics.[24] Given these challenges, it is clear that postsecondary education officials, elementary and secondary educators, government, and community agencies must work together to help address these problems. Only through a coordinated effort can America hope to reach these at-risk children at an early age, so that they can take advantage of a postsecondary education by the time they reach college age.

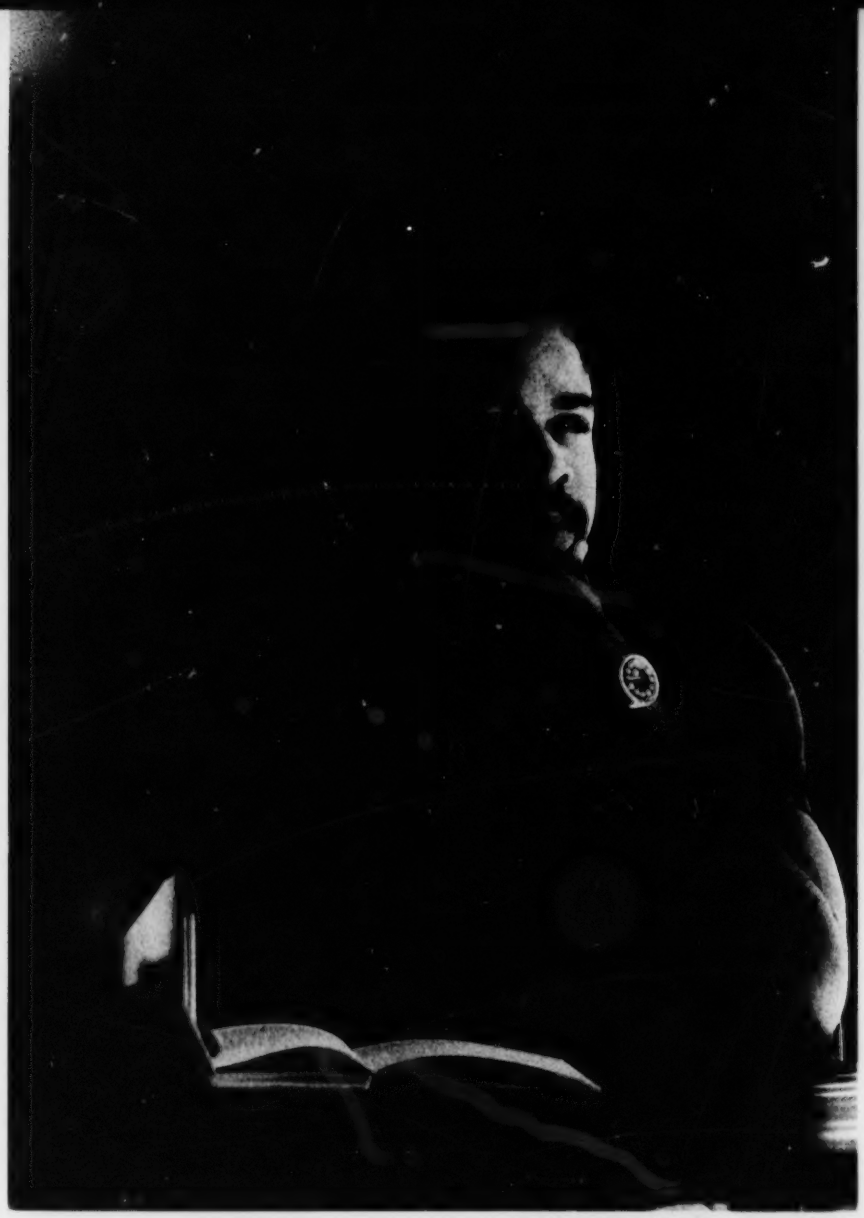


Photo credit: Billy Howard, Emory University

Graduate and Professional Education

As a group, students of color achieved percentage gains in graduate and professional enrollments during the 1980s, even though their numbers remain few in many states. For the decade, total minority enrollment increased by 80.7 percent at the professional level and 52 percent at the graduate level. By contrast, whites achieved a moderate gain of 19.2 percent in graduate enrollment while declining 10.5 percent in professional school enrollment. (Table 6).

Nonetheless, as shown in the *1991 Minority Status Report*, the percentage of minorities enrolled in post-baccalaureate education generally remained the same or declined slightly during the 1980s.

Overall, from 1980 to 1990, graduate schools recorded more frequent gains in state enrollments than did professional schools (Table 22). Only Arkansas and West Virginia showed declines in graduate enrollment, while 29 states cited losses at professional schools. These 29 included 10 of 12 midwestern states, four states in the Northeast, six in the South and nine in the West. Because of their larger representation in professional schools, enrollment losses experienced by whites accounted for much of this decline, though some states also cited considerable enrollment declines among African Americans and American Indians (Tables 23 and 26).

This section relies on NCES enrollment data covering the period from 1980 to 1990. It does not compare enrollment and population changes because graduate and professional enrollment [25] is not tied as closely to a student's state of residence as is the case at the undergraduate level.

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African Americans

The 1980s showed a mixed record for African Americans in graduate and professional studies nationwide. On the positive side, 31 states cited progress in both categories by the end of the decade, including eight that doubled graduate and professional enrollments (Table 23). Despite this progress, however, the actual number of African Americans pursuing advanced degrees in 1990 remained abysmally low, and the number completing degrees declined. In graduate schools, four states had ten or fewer African Americans enrolled, compared with 12 states that enrolled ten or fewer African Americans in professional schools.

However, overall many states showed high percentage gains for African Americans during the decade. In the South, Florida showed an improvement of 91.4 percent at the graduate level and a near tripling of professional institution enrollment from 1980 to 1990.[26] At the graduate level, African Americans' gain mirrored the 99.3 percent increase in total enrollment and at the professional level, their gain easily outpaced a gain among all students of 52.4 percent. However, in 1990, African Americans accounted for only 6.6 percent of Florida's graduate students, unchanged from 1980. At the professional level, African Americans represented 6.5 percent of all students in 1990, up from 2.9 percent in 1980.

Virginia posted similar percentage gains, as African Americans had a 96.6 percent enrollment increase at the graduate level—again close to the 101.6 percent total gain at the post-baccalaureate level from 1980 to 1990. At the professional level, African Americans in Virginia achieved a 156.8 percent gain, far outpacing an overall enrollment increase of 21.8 percent. In this instance, however, the numerical gains did translate into increased representation in both professional and graduate enrollments. African Americans accounted for 13 percent of graduate enrollments in Virginia in 1990, up from 10.1 percent in 1980. At the professional level, African Americans represented 15.4 percent of all enrollments, an increase from the 1980 rate of 5.2 percent.

Figures from South Carolina illustrate how numerical gains for a minority group still can result in a significant loss in representation. From 1980 to 1990, the state reported more than 50 percent growth among African Americans in both graduate and professional enrollments, but the increase among all students at these levels was much greater. In 1990, African Americans represented 10 percent of all graduate students, down from 11.6 percent in 1980. At the professional level, African Americans accounted for 6 percent of all enrollments, down from the 1980 figure of 15 percent.

Five southern states also showed declines for African Americans in at least one of the two categories from 1980 to 1990. The largest for the region was Arkansas' 32.4 percent drop in African American graduate enrollment, followed by Alabama's 24.5 percent decline at the professional level. In Arkansas, African Americans represented only 5.6 percent of all graduate school enrollments in 1990, down from 8.2 percent in 1980. In Alabama, African Americans accounted for 7.7 percent of all professional enrollments in 1990, down from the 1980 rate of 8.7 percent.

Among large population states, African Americans generally made improvements from 1980 to 1990 that equalled or surpassed overall enrollment trends in graduate and professional education. In New York, African Americans achieved a 54.9 percent gain in graduate enrollment and an 81 percent increase in professional enrollment for the period. Among all students, New York showed graduate and professional enrollment gains for the decade of 40.9 percent and 8.8 percent, respectively. Even after these increases, however, African Americans still represented only 6.1 percent of all graduate students in 1990, virtually unchanged from their 1980 level. At professional schools, African Americans accounted for 5.8 percent of all students in 1990, up from 3.4 percent in 1980.

In Illinois, African Americans experienced a 76.4 percent gain in graduate enrollment and a 54.4 percent increase in professional enrollment from 1980 to 1990. These figures surpassed trends in total enrollment, which showed a 42.2 percent gain at the graduate level and a 1.3 percent loss at the professional level for the decade. But the progress among African Americans did little to increase their proportional representation in post-baccalaureate education. In 1990, African Americans accounted for 7.1 percent of graduate enrollments, up from 5.7 percent in 1980. At the professional level, African Americans represented 4.9 percent of all enrollments, up from 3.1 percent in 1980.

In Texas, African Americans made numerical gains in both graduate and professional enrollments from 1980 to 1990 but lost ground in their share of graduate enrollments. Among all students, total graduate enrollments increased by 38.8 percent, compared

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with an increase of 19.5 percent in enrollment for African Americans. Proportionally, the share of African Americans in graduate education declined slightly for the decade, from 6.2 percent in 1980 to 5.3 percent in 1990. At the professional level, however, African Americans made enrollment gains of 22 percent from 1980 to 1990, compared with a 12.8 percent decline among all students.

California experienced an increase of 47.2 percent in African American graduate enrollment from 1980 to 1990, but showed no gain at the professional level for the decade. These figures were generally consistent with other state trends, however. The total number of graduate students increased 53.3 percent for the decade, while the professional totals declined by 1.4 percent. Overall, African Americans in 1990 represented about 4 percent of all graduate and professional students, basically unchanged from 1980.

Many states with small numbers of African Americans enrolled in graduate and professional schools showed large percentage increases, but the actual number of students enrolled remained few. In the Midwest, Minnesota doubled its African American graduate enrollments from 1980 to 1990, while Iowa reported a 178.1 percent gain in the number of professional students for the same period. But in both cases, African Americans continued to represent less than 3 percent of total enrollments in any category. In the West, African Americans achieved a threefold gain at the graduate level and a sixfold increase at professional schools in Arizona during the decade. Nonetheless, western states enroll only a small number of African American students and proportional gains in total enrollment from 1980 to 1990 were limited.

Hispanics

In keeping with total enrollment trends, Hispanic enrollment in post-baccalaureate programs also rose considerably during the 1980s. Nationwide, only four states failed to show improvement at both the graduate and professional levels, and 14 states more than doubled their enrollments in both categories (Table 24).

Among states with a large Hispanic population, Florida tripled Hispanic graduate enrollments and nearly tripled Hispanic professional enrollment as well from 1980 to 1990. In both categories, Hispanic gains exceeded the increases in total graduate and professional enrollment. However, Hispanics still accounted for only a small proportion of the post-baccalaureate student population. Overall, Hispanics represented 7.5 percent of graduate school enrollments in 1990, up from 4.6 percent in 1980. At the professional level, Hispanics showed a larger proportional gain, from 5.3 percent in 1980 to 14.6 percent in 1990.

New York reported a 50.3 percent increase in Hispanic enrollment at the graduate level from 1980 to 1990, slightly greater than the total enrollment increase for all students. However, Hispanics more than doubled their professional enrollments, far surpassing the 8.8 percent gain recorded in total enrollment at the state's professional institutions. Nonetheless, these increases yielded few proportional gains, as Hispanics still represented less than 5 percent of all graduate and professional students in the state in 1990.

In California, Hispanics showed progress of 124.7 percent at the graduate level and 11.4 percent at the professional level, in both cases outpacing general graduate and professional enrollment trends in the state from 1980 to 1990. Again, however, proportional gains were small, with Hispanics still accounting for only about 6.8 percent of all graduate and professional students in 1990.

New Mexico, which ranks eighth in Hispanic population, had 68.6 percent growth at the graduate level, which was consistent with the state's total graduate enrollment patterns from 1980 and 1990. Overall, Hispanics represented 16.1 percent of graduate enrollments in 1990, up only slightly from the 1980 level. Hispanics made a small gain in professional enrollment despite an overall loss of 5.3 percent among all students. With these gains, Hispanics accounted for 22 percent of all professional enrollments in 1990, up 1.7 percent from 1980.

Arizona experienced large gains in both graduate and professional enrollment of Hispanics during the 1980s. The state nearly tripled its Hispanic graduate enrollment, while Hispanic professional enrollment more than doubled during the period. As in New Mexico, Hispanics recorded post-baccalaureate gains at levels far above those for the general population. Among all students, Arizona had growth of 57.2 percent at the graduate level and 5.2 percent at professional schools from 1980 to 1990. But Hispanic proportional gains, particularly at the graduate level, were small. At the professional level, Hispanics represented 11.5 percent of all 1990 enrollments, up from 4.8 percent in 1980.

In Texas, Hispanics showed moderate gains for the 1980-90 period in both categories, while the general student population experienced an increase in graduate enrollments but a decline at the professional level. Overall, Hispanic enrollment grew by 58.1 percent in

graduate schools and 37.5 percent at professional schools for the decade. By comparison, total post-baccalaureate enrollment showed a 38.8 percent increase at the graduate level and a 12.8 percent loss at professional schools. These numbers translated into small increases in proportional representation of Hispanics in both graduate and professional schools, though Hispanics represented only 7.9 percent of the state's graduate students and 9.1 percent of all professional students in 1990.

In addition to Florida and Arizona, other states that doubled the number of Hispanics at both graduate and professional schools from 1980 to 1990 included Delaware, Georgia, Illinois, Iowa, Maryland, North Carolina, and South Carolina. For Iowa and Missouri, the gains for Hispanics at the professional level far surpassed total enrollment, which remained essentially unchanged since 1980. Nonetheless, Hispanics in these states continued to represent only a small proportion of total enrollments in 1990.

For Hispanics, improvements in the Northeast from 1980 to 1990 trailed those realized elsewhere in the nation. Connecticut doubled Hispanic enrollments at the professional level, while Rhode Island and Vermont doubled Hispanic graduate enrollment. However, proportional representation remained very low for Hispanics in these states.

In the West, Oregon had a fourfold increase in Hispanic enrollment at the graduate level—the largest gain in the region from 1980 to 1990. Yet even with this gain, Hispanics accounted for only 1.2 percent of the state's graduate enrollments. Colorado more than tripled its Hispanic graduate enrollment, exceeding general graduate enrollment trends in the state. Hispanics also recorded a 57.1 percent gain at the professional level, while the total student population in this category dropped by 3.8 percent. In 1990, Hispanics represented 5.8 percent of all professional students in Colorado, up from 3.6 percent in 1980.

Asian Americans

Asian Americans continued to account for a growing share of the graduate and professional student population during the 1980s (Table 25). By decade's end, 30 states had doubled Asian American enrollment in both categories and some showed threefold and fourfold gains. Unlike national trends, however, the improvement typically was greater at the professional rather than the graduate level. Overall, 40 states doubled Asian American professional enrollment, compared with 35 at the graduate level.

In California, Asian Americans more than doubled their enrollments in both graduate and professional education from 1980 to 1990, leading to a large proportional gain in both categories. Overall, Asian Americans accounted for 15.4 percent of all professional enrollments in 1990, up from 7.2 percent in 1980. At the graduate level, Asian Americans represented 9.6 percent of all students, up from 5.9 percent in 1980.

Other large states saw similar increases for Asian Americans, particularly at the professional level. In Illinois, for instance, Asian Americans made a fourfold gain at professional schools, increasing their proportional representation from 2.1 percent of all students in 1980 to 9.5 percent in 1990. Asian Americans also doubled their graduate enrollments in Illinois from 1980 to 1990, but this

Photo credit: Stephen Long, University of Massachusetts

yielded only a small proportional gain among the entire graduate student population.

New York, Pennsylvania, and Texas also showed much stronger enrollment growth for Asian Americans at the professional level from 1980 to 1990. In New York, professional enrollment of Asian American students rose nearly fivefold as their proportional representation increased from 1.9 percent in 1980 to 8.2 percent in 1990. Pennsylvania and Texas had nearly similar percentage gains during this period. In Pennsylvania, Asian Americans increased their proportional representation from 1.4 percent in 1980 to 8.1 percent in 1990; in Texas, the share of Asian Americans in professional schools rose from 1 percent to 7.5 percent.

Hawaii was one of the few states with a large Asian American and Pacific Islander population to deviate from this general trend of larger increases at professional schools. From 1980 to 1990, Hawaii experienced an 89 percent enrollment gain for these students in graduate institutions but a 2.5 percent decline at professional schools. Still, these figures were somewhat similar to state trends in total enrollment. In fact, Asian Americans and Pacific Islanders actually increased their proportional representation at professional schools—from 63.1 percent in 1980 to 71.4 percent in 1990—despite lower enrollments. At the graduate level, Asian Americans accounted for 41.4 percent of all graduate students in the state in 1990, up slightly from 1980.

During the 1980s, Massachusetts and Virginia stand out as two states where Asian Americans made significant gains in their respective shares of professional and graduate school enrollments. In Virginia, Asian American students represented 10.2 percent of the professional student population in 1990, up from only 1.7 percent in 1980. A fivefold gain in the number of Asian American students accounted for this proportional increase. The state also tripled enrollment of Asian Americans at the graduate level, but this led to only a small proportional gain for the period. In Massachusetts, Asian Americans represented 7.2 percent of professional enrollments in 1990, up from 2 percent in 1980. However, Asian Americans achieved only a slight proportional increase at the graduate level in Massachusetts.

At the graduate level, states with relatively small Asian American populations, such as Delaware and South Carolina, had the largest percentage gains for Asian Americans from 1980 to 1990, but these gains did not translate into significant proportional increases. Again at the professional level, small Asian American population states, including Alabama, Maine, and West Virginia, had the greatest percentage gains, but the total number of Asian Americans enrolled in these states remained small. Overall, five states with professional schools had ten or fewer Asian students in 1990: North Dakota, South Dakota, Nevada, Montana, and Wyoming.

American Indians

As with other minority groups, American Indians showed large percentage gains and smaller numerical gains from 1980 to 1990. Overall, 27 states reported progress in both graduate and professional institution enrollments (Table 26). At the graduate level, only 19 states had more than 100 enrolled American Indian students, and three had ten or fewer. At professional institutions, only two states had more than 100 American Indian students in their programs, while 24 states with professional programs had ten or fewer—including five with no American Indian professional students at all.

Among states with large numbers of American Indians, Oklahoma showed gains of 69.5 percent at the graduate level and 57.7 percent at the professional level for the decade. In both cases, American Indians outpaced general trends for the state, which had a 39.9 percent increase in graduate enrollment but a 10.7 percent decline at the professional level. Overall, however, they made only small proportional gains in the state. Still, American Indians represented 3.3 percent of total graduate and 3.9 percent of total professional enrollments in 1990, one of their highest levels of representation nationwide.

A similar trend in percentage gains was evident in California, where American Indians showed a 60 percent increase at graduate schools and a 56.4 percent gain at professional schools from 1980 to 1990. Both gains exceeded enrollment trends among the general student population. Nonetheless, American Indians continued to represent less than 1 percent of total graduate and professional enrollments in California in 1990.

Texas deviated slightly from this pattern, as American Indians showed a 1.1 percent decline at the graduate level but a 67.5 percent gain at professional schools from 1980 to 1990. These figures were not consistent with general post-baccalaureate enrollment trends in Texas, where the number of students attending graduate institutions increased moderately but the total attending professional schools declined by 12.8 percent. American Indians, however, continued to represent a small share of the state's graduate and professional student population.

Arizona was one of four states to double American Indian enrollment in both graduate and professional schools, again surpassing general post-baccalaureate enrollment trends for the 1980-90 period. American Indians achieved small proportional increases as well, including a 1.4 percent gain at the professional level. Vermont, South Carolina, and Florida also doubled American Indian enrollments at both the graduate and professional levels, but the overall numbers of students remained small.

North Dakota recorded major gains for American Indians at the professional level but showed a net loss at graduate institutions for the decade. American Indian professional school enrollment nearly tripled in North Dakota, accounting for 5.7 percent of all 1990 enrollments, up from 2 percent in 1980. At the graduate level, however, a drop of 9.4 percent in American Indian enrollment meant that they represented only

Photo credit: Gary G. Dineen, Marquette University

1.3 percent of all graduate students in 1990, down from 2 percent in 1980.

Elsewhere, New York showed gains of 24.6 percent at the graduate level and 56 percent at the professional level. In both cases, and particularly in professional school enrollment, these gains surpassed general trends among all post-baccalaureate students. But New Jersey's 60.7 percent graduate gain for American Indians during the decade was tempered by a 25 percent enrollment drop at professional schools. American Indians accounted for less than 1 percent of total enrollments at the graduate and professional levels.

The southern region showed some enrollment progress for American Indians as Alabama tripled its professional student counts while Georgia made similar progress at the graduate level from 1980 to 1990. Six other states had increases in both graduate and professional enrollments, while seven states experienced a decline in one of these two areas. Maryland, North Carolina, and Tennessee all suffered a drop in professional enrollments, while Arkansas, Kentucky, and West Virginia lost ground at the graduate level during the decade. Again, however, total numbers of American Indian students remained small.

Midwestern states generally showed moderate increases in the number of American Indians in both categories, except for Indiana, the only state nationwide to report a decline at both levels. Indiana experienced a 5.4 percent decline among American Indians at graduate institutions and a 30.8 percent loss at professional schools from 1980 to 1990. Ohio sustained a 52.4 percent loss at the professional level.

In the West, several states recorded large graduate-level gains for American Indians during the 1980s, including an eightfold rise in Wyoming and fourfold increases in Colorado and Nevada. However, the numerical gains were small. In addition, Hawaii, Nevada, and Wyoming had no American Indian students at the professional level, while Idaho enrolled only one student in 1990.

American Indians and Native Alaskans showed gains in graduate school enrollment in Alaska from 1980 to 1990. Together, they experienced a 40 percent gain in total graduate enrollment during the decade. However, their proportional representation remained small at about 1.7 percent of total graduate enrollment. The state has no institutions granting professional degrees.

Recent State Enrollment and Financing Trends, 1990 to 1992

For the past three years, colleges and universities have had to face some of the toughest budget cuts ever in American higher education. The resulting tuition increases and funding cuts have left many students looking to bridge the growing gap between family income and college costs. These problems are even more dramatic for students of color, particularly those from low-income families. Yet higher education funding problems vary greatly among the states.

To gain more insight about how state budget shortfalls and the resulting state policy changes and tuition increases are affecting student enrollments, interviews were conducted with state higher education officials in a number of states, including Virginia, Maryland, New York, Pennsylvania, Tennessee, California Wisconsin, and Florida. The states' most recent enrollment data also are analyzed and presented in this final section. Information on state funding trends during the past two years—including state funding changes and funding for individual colleges and student aid programs—is based on research from the Center for Higher Education at Illinois State University. Information about tuition increases for the 1992-93 academic year is taken from the College Board's *Annual Survey of Colleges 1992-93.*

This section of the special focus is limited in that it focuses on state issues, not national economic concerns that affect higher education in many regions. As a result, policy changes at the federal level—such as the recent cut in the maximum Pell Grant and the shift in financial aid from grants to loans—are not addressed in this report. Nonetheless, these federal changes, when combined with state cuts, can pose significant barriers to students of color as they attempt to access higher education in the 1990s.

Photo credit: Prince George's Community College

Many competing factors are at work in these states, including a recession that has sent unemployed workers back to school. Some states also have increased financial aid to keep up with rising tuition and lower family incomes, and officials say the recession has caused more people to apply for aid. In other cases, states have reported most of their enrollment growth at lower-cost two-year institutions, not at those granting baccalaureate degrees. Consequently, tougher economic times within the states have not necessarily translated into a drop in enrollment for students of color.

Some states were making some progress in minority enrollment even as they faced higher education funding pressures. Virginia experienced a 13 percent drop in state support for higher education between 1990 and 1992.[27] Yet all ethnic minorities made enrollment gains in public institutions from 1990 to 1991.[28] One reason for this progress may be student aid, which Virginia increased by 43 percent for needy students despite the recession. The state still faces numerous challenges, however: community colleges have instituted new fees, and the state now requires all out-of-state residents to pay the full share of their education costs, up from 75 percent previously.[29] For the 1992-93 school year, however, leading four-year institutions also increased tuition and fees[30] including a 16 percent increase at the University of Virginia and a 7 percent increase at Hampton University. The impact of current tuition increases on student enrollments in the state has yet to be assessed. When this report was written state officials were just beginning to collect data from fall 1992 to determine if institutions also were able to provide more financial aid to students.

Neighboring Maryland showed many similarities to Virginia. Despite some statewide budget cuts, enrollment of students of color had increased between 1990 and 1991. African Americans achieved a 9.3 percent gain in total enrollment, which encompasses all three of the state's major categories—two-year community colleges, four-year public institutions, and other independent institutions in the state.[31] From 1990 to 1991, Asian Americans made similar progress, with a total enrollment gain of 10.6 percent and moderate growth in all three sectors. Hispanic students recorded a total enrollment gain of 9.6 percent. American Indians gained 13 percent in total enrollment, which included 20 percent growth at independent colleges and a 15.5 percent gain at community colleges. In all cases, these figures for students of color surpassed total enrollment changes among all students. From 1990 to 1991, total enrollment in Maryland increased by 5 percent, including a 9.5 percent gain at community colleges and a 2 percent increase at four-year public institutions, and remained relatively stable at independent colleges. [32]

Despite these positive trends, Maryland continues to face financial pressures. State funding for the University of Maryland System declined 8 percent in 1992, and in the spring 1992 semester the university system instituted a 15 percent tuition surcharge.[33] For the 1992-93 year, tuition increases included 12 percent at Bowie State University and 8 percent at the University of Maryland–College Park. But for low-income students, state lawmakers are trying to cushion these fee increases with more financial aid. From 1990 to 1992, the state increased student financial aid by 30 percent. However, as with Virginia, fall 1992 enrollment data are not yet available to assess the possible effect of this latest round of state budget cuts and tuition increases. Preliminary 1992 data indicate that public enrollment in the state held relatively steady between 1991 and 1992.[34]

Budget troubles have coincided with some minority enrollment losses in New York state. The recession has brought a new urgency in New York state about the issue of access. Statistically, the data show cause for concern: African American enrollment dropped by 6.2 percent at two-year institutions from 1990 to 1991.[35] American Indian enrollment fell by 11 percent at the two-year level, while four-year enrollments for both groups showed little change. Asian Americans

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lost about 9 percent at two-year institutions and 7.6 percent at four-year institutions.

Like most large states, New York has faced serious budget troubles. During the past two years, for example, the City University of New York (CUNY) has seen its budget allocations cut by 17 percent. "The last several budgets have been very severe," said one top official at CUNY, where students of color make up 63 percent of the student body.[36] As mentioned earlier, tuition for fall 1992 increased by more than 30 percent at many of the system's campuses.

Despite state budget cuts, state student aid has increased 24 percent during the past two years.[37] Funds allocated under New York's Tuition Assistance Program (TAP) increased from $435 million in the 1991 academic year to $511 in the 1992 academic year. At the same time, however, the number of TAP recipients also increased, from 279,000 to 292,000.[38]

For many students, the effects of New York's financial aid increases are limited because of the state's budget problems. For example, Liberty Scholarships, a financial aid program set to begin in fall 1991 for low-income students, has been delayed indefinitely. "It was a good idea that never materialized," said one official. "There was absolutely no money for it."[39]

At CUNY, the recession of the late 1980s and early 1990s also has meant fewer off-campus jobs for students and a much heavier use of work-study funds. In the 1991-92 academic year, CUNY had to provide $1.5 million of its own money to cover the work-study commitments it had made to students. For 1992-93, the university simply reduced the potential work-study pool through more restrictive award rules. "With the lack of jobs [in the community], they take work-study jobs more readily than ever," one financial aid officer said.[40]

In the wake of such frustration, a group of CUNY faculty and students has sued the state, charging that the university receives inadequate funding because of its minority base. "We coúídn't get the legislature to change, so we brought legal action," said a CUNY professor who is a lead plaintiff in the suit.[41] The administration has not joined in the suit, but plaintiffs met with state lawmakers last fall to discuss the funding situation. Governor Mario Cuomo has said he believes the case has no merit, and the state has filed a motion to dismiss.[42] Court arguments are possible sometime in 1993.

Although Tennessee increased higher education funding by 5 percent from 1990 to 1992, the state found itself grappling with a shortage of financial aid funds to meet increased demand. During the 1991 academic year, more than 14,000 students who applied for state student aid were turned away for lack of funds; the state would have needed nearly $10 million more to meet these students' needs.[43] At the same time, the state also has continued to step up its student recruiting efforts and has increased enrollment. Yet much of this increase is concentrated at community colleges.

In the public sector, African Americans increased their enrollment at Tennessee community colleges substantially from 1990 to 1992, including a 19.8 percent increase for 1990-91 and an 8.4 percent gain from 1991 to 1992.[44] These gains were indicative of those made by other ethnic minorities during the 1990-92 period.

For the most recent year available, 1991 to 1992, total enrollment increased 6.6 percent at Tennessee's two-year institutions but only 1.7 percent at four-year colleges and universities.[45] For African Americans, a 3.7 percent increase at four-year institutions was less than half of the enrollment progress cited at two-year institutions. Asian Americans also experienced 22.9 percent growth at two-year colleges from 1991 to 1992, compared with a 10.5 percent increase at four-year institutions. Although their numbers were small, American Indians achieved a 33.9 percent increase at two-year institutions but suffered a 7 percent decline at four-year institutions. White students also posted a 6 percent gain at two-year institutions but a small 1 percent gain at four-year colleges. Only Hispanics deviated from this trend, showing gains of 14.1 percent at four-year institutions from 1991 to 1992 but a smaller 8.9 percent increase at two-year colleges.

Even with the economic decline, Tennessee officials have conducted more student outreach efforts and also have provided more funding for community colleges. State legislators have allocated 13 percent more funds to these colleges during the past two years, compared with a 2 percent increase for the University of Tennessee System during the same period.

In Pennsylvania, some alarming indicators about African American enrollment have caused concern among a growing number of educators and political leaders. Much of this concern grew out of a variety of reports showing little progress in the number of African American students seeking degrees during the 1980s.

Data from the Pennsylvania Department of Education showed that in 1980 African Americans represented 9.6 percent of the state's 18-to-24-year-old population and 8.2 percent of its undergraduate enrollments.[46] By 1990, however, the African American population share of 18-to-24 year-olds had increased to 10.5 percent, while African Americans' share of undergraduate enrollment actually dropped to 6.5 percent.[47] A report from the Pennsylvania Higher Education Assistance Agency (PHEAA) shed more light on this trend.

PHEAA's report found that while the total number of African American undergraduates seeking degrees decreased only slightly, the number attending full-time dropped by 8.5 percent.[48] In addition, enrollment of first-time, full-time African American students also dropped 18.9 percent during the decade. Only the study's most recent figures seemed to show improvement. From fall 1988 to fall 1989, the number of degree-seeking African American students increased by 4.8 percent. From 1990 to 1991, total enrollment of African Americans

increased by 7 percent, but this figure included both degree-seeking and non-degree-seeking students.[49]

The Pennsylvania Legislative Black Caucus has criticized the enrollment trends in an effort to mobilize political support for change. The statistical data "depicts a grim picture of the reality for the African-American community and its presence in the Pennsylvania higher education complex," noted in the report, *The African American Reality in Higher Education in Pennsylvania: Opportunities Denied.* "As enrollments grew across the Commonwealth, opportunities for African Americans declined."[50]

Since release of this report, many educators have joined in discussions to help address the problem. In October 1992, more than 50 Pennsylvania colleges and universities sent representatives to a two-day meeting in Philadelphia to discuss strategies to increase the recruitment and retention of students of color in the state. Among the suggestions offered at the conference: reaching out to youth in the inner cities; hiring more minority faculty, even on an adjunct basis if necessary; and building a healthy campus environment from the top down.[51]

While most of the attention has focused on African Americans, data also show the need for diligence in promoting enrollment of all students of color. The recent discussions may provide the foundation for improvement. "People want to see numbers that move in the right direction," stated chairman of the Pennsylvania Legislative Black Caucus Advisory Committee on Higher Education.

In an effort to control costs, some states are looking at enrollment caps, also known as enrollment "management." Through these policies, states seek to limit the number of students at one or more public institutions, sometimes by setting overall enrollment ceilings or through other means such as stricter academic guidelines and earlier application deadlines for admission and student aid.

Although enrollment management has become more popular because of the lingering recession, such programs have been in place in a few states for several years. California, Colorado, Washington, Oregon, and Wisconsin are among the states that used enrollment management in the 1970s and 1980s, and North Dakota joined the list in 1990.[52] As more states move to limit enrollments in the face of mounting budget cuts, concern has arisen about how such policies may affect underrepresented students.

"In all of the states there is concern that enrollment limitation may unfairly restrict the enrollment of underrepresented minority students," wrote Judith Gill, director of research and policy analysis at the Western Interstate Commission for Higher Education, in a 1991 study on the subject in western states.[53] To address this potential problem, most western states with enrollment management offer certain safeguards for students who fail to meet certain requirements but have the potential to succeed.[54] In these cases, states attempt to offer a "window of opportunity" for underrepresented students, such as reserving certain slots for students who may not meet all the necessary academic standards but still have the tools to succeed. Oregon and North Dakota also have created committees to study the issue of minority enrollment and new admission standards.

The difficulty, however, is that state budget cuts pose a major challenge to this framework. In California, enrollments at some of the state's flagship four-year public institutions are below previous demographic projections.[55] Several years ago, California had major plans to expand its higher education programs. Demographics showed tremendous growth through the year 2005—particularly among students of color—with the need for up to 50 new campuses and education centers.[56] But in 1992, the state found itself still mired in a three-year budget crunch that most officials predict will not end soon.

Both the University of California and the California State University systems have reduced enrollments, while the state's community colleges claim to have turned away 100,000 students last year because of class reductions.[57] State support for higher education has dropped by 12 percent during the past two years, and the state's Postsecondary Education Commission has had difficulty keeping current information on the enrollment shifts.

One trend is unmistakable, however. "Students are extremely worried," said one California community college official.[58] The worried include many students of color, as shown by a recent demonstration by students during a Latino convocation held for faculty, administrators, and political leaders.[59]

Educators talk of a growing "access gap," in which more students of color are eligible for the merit-based University of California and California State University systems but do not attend. Under the current policy, students gain admission to these systems if they rank near the top of their graduating classes and meet other academic criteria. In recent years, students of color have made tremendous gains in reaching these merit-based requirements. African Americans made a 60 percent gain in eligibility and Hispanics a 30 percent gain, based largely on high school class standing.[60] Yet, one report says higher education officials now have raised some of these standards further because of the lack of funds.[61] In addition, fees have increased by 24 percent in the University of California system and 40 percent at California State University for the 1992-93 academic year, this report states.

"The bad news is that California is on the verge of breaking its commitment to these students," said Warren Fox, executive director of the Postsecondary Education Commission.[62] Some of this gap already is evident. Overall, admission rates for African American and Hispanic applicants have dropped by 5 percent in the University of California system during the past four years.[63]

Financial aid programs also have felt the squeeze of the recession. The number of students applying for Cal Grants—the state's major financial aid program—has increased by 40 percent. Yet only

Photo credit: Washington University

one in three eligible students actually is receiving such aid; as a consequence, student borrowing is on the rise.[64]

For 1991-92, full-time enrollment declined by 10,000 in the California State University system; for the University of California system, the decline was 5,500.[65] The 1992-93 budget promises even more cutbacks: California State University faces a $125 million cut, while the University of California system will make do with $225 million less, says a report from the California Assembly Committee on Higher Education.[66] "Rather than building new campuses, university executives foresee the possible closure of existing institutions. Expansion has been replaced by downsizing as the new buzzword of higher education."[67]

Gill's research on western states also shows that Oregon and North Dakota recently began their enrollment caps, primarily in response to budget constraints.[68] Elsewhere, in 1987, long before the recession that decimated many state budgets, Wisconsin began using enrollment "management".[69] Faced with a variety of fiscal and educational pressures, Wisconsin embarked on this policy in the 14-site University of Wisconsin System. The goal: to reduce enrollment, increase per-student expenditures, reduce class sizes, and distribute students more evenly throughout the system.[70] A cornerstone of the state's program is a strong commitment to promoting diversity—despite downsizing. The Design for Diversity program adopted by the state Board of Regents sought to "balance enrollment management with access for underrepresented groups" and to improve retention as well.

Thus far, the state has shown progress. Before enrollment management, the state's per-student expenditure was far below the national average. By 1992, this expenditure had increased by 37 percent. Full-time enrollment dropped by 4.1 percent from 1987 to 1990, although head-count enrollment showed only a slight decline of 2.8 percent for this period. Yet these figures are consistent with projections about the declining number of 18-year-olds in the state. In 1991, access to the University of Wisconsin system for high school graduates was at its highest level since 1986; in addition, 93 percent of all undergraduate applicants were accepted somewhere in the university system.[71]

As for minorities, most appear to have gained greater access to the Wisconsin university system. From 1990 to 1991, the most recent year for which data are available, Hispanics achieved a 10.6 percent gain, Asian Americans a 9.4 percent increase, American Indians a 7 percent gain, and African Americans a 1.4 percent increase. In comparison, total enrollment and enrollment of white students remained largely unchanged.[72]

State officials laud the program for helping improve quality and access during tough economic times. "Enrollment management helped Wisconsin avoid the disruptions in services being experienced in states which have declining state revenues but increasing or stable enrollments," says a report issued in October 1992.[73]

Unlike other states, Wisconsin has faced relatively light opposition to its enrollment management program. One reason for this is that it was implemented precisely at the time the state was to experience a decline in its 18-year-old population. In 1995, Wisconsin expects the pool of high school graduates to go on the upswing, and the state's leaders already are discussing how to alter the program to accommodate that increase. One official also said that Wisconsin's college and university campuses generally are "more comfortable" with the state's centralized education administration, a situation that may be unique among the states.[74]

In Florida, the state does not impose enrollment caps, but it is placing new

pressures on public colleges and universities to limit the number of students on the basis of available funds. Like other states, Florida has had to deal with major budget cuts in higher education during the recession. State support has dropped by 9 percent during the past two years—including a 14 percent decline in aid to community colleges. Overall, per-student funding in the public sector has fallen nearly $2,000 in the past three years, from $7,200 per full-time equivalent student in fall 1989 to $5,300 in fall 1992.[75] To deal with the problem, the state has established a series of goals for public colleges and universities. In effect, this policy establishes modified enrollment targets. At four-year colleges, the number of first-time, full-time students should not exceed 15 percent of the past year's high school graduates; at community colleges, the rate is 30 percent.[76] Students who opt for a two-year institution are guaranteed admission to senior colleges if they receive their associate's degree and pass a College Level Academic Skills Test (CLAST). Students are given several chances to pass the test and most students are not denied access to a four-year institution because of test failure.[77] However, there are serious concerns among some leading community college educators that the CLAST is having a severe impact on minority students in the community college system because students must pass the CLAST to receive an associate's degree.[78] One community college president noted that although African American enrollments in community colleges have increased their associate's degree awards have declined. He attributed part of this decline to the CLAST requirement."[79]

Overall, minority students may have been helped by a recent increase in state student financial aid. Despite cuts elsewhere in higher education, the Florida legislature managed to support a 15 percent funding increase for the past two years. With these extra funds, the state was expected to increase the number of financial aid awards by 21 percent during the 1991-92 year.[80] Although minority enrollments increased by 10.3 percent from 1990 to 1991, preliminary 1992 enrollment data indicate enrollments declines for Africans Americans and whites between 1991 and 1992.

Although the state has no official enrollment caps, "The funding does limit how many students can enroll," said one official with the Florida Board of Regents.[81] If colleges exceed these limits, they do not get extra subsidies to cover the cost of the additional students, the official said. While these data are not official, the information does show a 1.7 percent decline for African Americans at four-year public institutions, along with an 8.1 percent drop for whites.[82] Given the recent budget difficulties, educators will need to monitor the effects of their policies on low-income students.

In studying Florida's new policy, the Southern Regional Education Board (SREB) said the state does not expect the enrollment policy to affect incoming freshmen. "However, transfer students who have not graduated from a state community college will find it nearly impossible to enter a university," the Board wrote. SREB also stated that enrollment management policies are under discussion in North Carolina, South Carolina, Tennessee, and Florida also are looking at the issue. Despite legitimate concerns about these policies, it is increasingly apparent that one state—Wisconsin—may be using enrollment "management" to develop a more effective higher education system. Part of the problem in studying this issue is the paucity of research currently available on the effects of enrollment management, particularly on low-income and minority students. At a time of economic uncertainty, such research is imperative.

Conclusion

At the state level, the four major ethnic minority groups made considerable progress in higher education enrollments during the late 1980s—a trend that appears to have continued into 1991. Despite these gains, however, African Americans, Hispanics, and American Indians remain underrepresented at colleges and universities, based on their share of state populations. In fact, as shown by the data presented in this report, numerical gains for some minority groups were not enough to increase their share of the state's total student enrollment. In several states, the number of African American and American Indian students in the 1980s increased, but at a rate below the documented growth among the rest of the student population. As state officials continue to face difficult budget decisions, they must not lose sight of these enrollment trends.

From the data presented here, it also is clear that the many new challenges states face in the 1990s carry enormous implications for students of color in postsecondary education. Even with rising minority enrollments, pressures from budget cuts, tuition increases, and uncertainty about student financial aid may have negative effects on minority students just as they are gaining a foothold in higher education. This already has begun occurring in the bellwether states of California and New York. In short, keeping the doors of opportunity open in the 1990s will require a strong commitment from state lawmakers, college presidents, and all educators, as well as an increased funding commitment to state financial aid programs for low-income students.

ACE also joins with others in calling for substantially greater research and monitoring on the effects of state fiscal problems on students of color in higher education. This effort should focus not only on changes in total enrollment but also on the decisions made by students because of the economy, such as choosing part-time over full-time enrollment or two-year colleges over four-year colleges. In addition, this research and monitoring also should focus on other issues, such as degree completion and mounting debt burdens, particularly for African American, Hispanic, and American Indian students.

As shown in this special focus, these issues are ones that deserve more review and policy discussion. States should set up their own activities to monitor the progress of students of color in higher education—and to ensure that progress continues.

Notes

1. U.S. Department of Commerce, Bureau of the Census, *Minority Economic Profiles* (Washington, DC: Bureau of the Census, 1992), 4.

2. U.S. Department of Commerce, Bureau of the Census, Current Population Reports, P20-459, *The Asian and Pacific Islander Population in the United States: March 1991 and 1990* (Washington, DC: U.S. Government Printing Office, 1992), 20.

3. U.S. Department of Education, National Center for Education Statistics, *Trends in Racial/Ethnic Enrollment in Higher Education: Fall 1980 through Fall 1990* (Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, 1990), 14.

4. U.S. Department of Education, National Center for Education Statistics, *Trends in Enrollment in Higher Education by Racial/Ethnic Category: Fall 1982 Through Fall 1991* (Washington, DC: U.S. Department of Education). In presenting its data, NCES cautioned that it has imputed prior-year enrollment data to account for nonresponding institutions or those with incomplete data. For 1991, imputed data account for 24 percent of all two-year institutions, compared with only 3.5 percent for four-year institutions. Data for 1990 have been revised from previously published figures.

5. Deborah J. Carter and Reginald Wilson, *Ninth Annual Status Report on Minorities in Higher Education* (Washington, DC: American Council on Education ,1990), 4.

6. Enrollment changes for African Americans at non-HBCUs were calculated using data from NCES in Table 4 and National Association for Equal Opportunity Research Institute enrollment data for HBCUs in Table 7.

7. National Center for Education Statistics, unpublished tabulations, December 1992. State data also were imputed for nonresponse.

8. Charles J. Andersen, *Student Financial Aid: The Growth of Academic Credit's Other Meaning* (Washington, DC: American Council on Education, 1992), 5.

9. Ibid, 2.

10. U.S. Department of Commerce, Bureau of the Census, "Preliminary Population Estimates," unpublished data, 1991.

11. American Council on Education, Office of Public Affairs, "Annual Enrollment Survey," December 1992, unpublished data tabulations.

12. The reader should be cautioned in interpreting data for two-year institutions, due to the high proportion of imputed data in the two-year sector. 1990 data were modified in December 1992 by NCES and differ from previously reported figures.

13. Most of the growth at Alaska's four-year institutions occurred because the state folded its two-year public institutions into the University of Alaska system.

14. The regions cited in this section are based on Census breakdowns. The following states are included in these regions:

Northeast — Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont
Midwest — Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin
South — Alabama, Arkansas, District of Columbia, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia
West — Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming

15. Data from the California Postsecondary Education Commission show a smaller decrease of 11 percent from 1981 to 1990 in African American for-credit enrollment at California community colleges.

16. The reader should be cautious in evaluating two-year enrollments in Alabama from 1980 to 1990. During the mid-1980s, the state for the first time instituted a computerized reporting system to record full-time equivalent enrollment at its two-year colleges. After the launch of this program, enrollments at two-year institutions showed a sizeable increase. In addition, the state's Department of Postsecondary Education has reported a 1990 two-

year college enrollment figure that is lower than the total enrollment figure listed in this document.

17. Population data from the Bureau of the Census, "Preliminary Population Estimates," unpublished data, 1991, Table 1. Enrollment data contained in U.S. Department of Education, National Center for Education Statistics, *Trends in Enrollment in Higher Education by Racial/Ethnic Category: Fall 1982 Through Fall 1991* (Washington, DC: U.S. Department of Education, January 1993).

18. As noted earlier, data from the California Postsecondary Education Commission show a smaller decrease of 11 percent from 1981 to 1990 in African American for-credit enrollment at California community colleges. Additionally, the state in 1990 piloted a new program, now fully operational, in which it conducts community college enrollment surveys at the end of an academic term, rather than several weeks into the term as was the previous practice. An official with the California Postsecondary Education Commission says this change may result in slightly higher enrollments in the future.

19. The Census Bureau states that 7.6 million Hispanics lived in California in 1990, the most of any U.S. state.

20. In 1983, Oglala-Lakota Community College became a four-year postsecondary institution and changed its name to Oglala-Lakota College.

21. Western Interstate Commission for Higher Education and the College Board, *The Road to College: Educational Progress by Race and Ethnicity* (Boulder, CO: Western Interstate Commission for Higher Education, July 1991).

22. Center for Demographic Policy, *Higher Education 1990-2010: A Demographic View* (Washington, DC: Institute for Educational Leadership, Inc., 1991), 4.

23. U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics 1992* (Washington, DC: National Center for Education Statistics, 1992), 27.

24. Ibid, 109.

25. Professional school enrollments include those students enrolled in law, medical, and dental schools.

26. The McKnight Black Doctoral Fellowship Program, launched in 1984 and administered by the Florida Endowment Fund, supported 120 African American doctoral students at Florida institutions from 1984 to 1990. Source: Florida Endowment Fund for Higher Education, *Annual Report 1989* (Tampa, FL: Florida Endowment Fund).

27. Edward Hines and Gwen Pruyne, *State Appropriations for Higher Education, 1992-93* (Normal, IL: Center for Higher Education, Illinois State University, 1992).

28. State Council of Higher Education for Virginia, "Research Note," RN-92002 (Richmond, VA: State Council of Higher Education for Virginia, July 31, 1992), and State Council of Higher Education for Virginia, EF Report, fall 1990, unpublished tabulations.

29. Southern Regional Education Board, *Coping with the Sluggish Economy: State Responses to Revenue Shortfalls and Their Significance for Public Schools and Higher Education* (Atlanta, GA: Southern Regional Education Board, 1991), 5.

30. College Entrance Examination Board, *Annual Survey of Colleges 1992-1993* (New York: The College Board, 1992). Copyright 1992 by the College Entrance Examination Board, all rights reserved.

31. Maryland Higher Education Commission Enrollment Information System Database, fall 1989, 1990, and 1991, unpublished tabulations.

32. Maryland Higher Education Commission Enrollment Information System Database, fall 1989, 1990, and 1991, unpublished tabulations.

33. *Coping with the Sluggish Economy*, 5, 9.

34. American Council on Education, "Annual Enrollment Survey," unpublished data tabulations, December 1992.

35. New York State Education Department, Office of Postsecondary Policy Analysis, *College and University Racial/Ethnic Distribution of Enrollment* (New York State Education Department, fall 1990 and fall 1991), Tables 1, 7.

36. Interview with Clyde Aveilhe, director of federal relations for the City University of New York, December 1992.

37. Edward Hines and Gwen Pruyne, *State Appropriations for Higher Education, 1992-93* (Normal, IL: Center for Higher Education, Illinois State University,1992).

38. Higher Education Services Corp., *Annual Report 1991-92* (Albany, NY: Higher Education Services Corp.), 14-15.

39. Interview with Betty Zeringue, Information Services, Higher Education Services Corp. of New York state, January 1993.

40. Interview with financial aid official, City University of New York, December 1992.

41. Sam Howe Verhovek, "250 at CUNY Sue New York, Citing Racial Bias in Budget," *New York Times*, February 27, 1991, B2.

42. Interview with Sheldon Weinbaum, faculty member, City University of New York, November 25, 1992.

43. National Association of State Scholarship and Grant Programs, *23rd Annual Survey Report: 1991-92 Academic Year* (Harrisburg, PA: National Association of State Scholarship and Grant Programs), 101.

44. Tennessee Higher Education Commission, Student Information System, unpublished tabulations on public higher education institutions.

45. Tennessee Higher Education Commission, Student Information System, unpublished tabulations on public higher education institutions, and Tennessee Independent Colleges and Universities, "Annual Enrollment Survey," fall 1990, fall 1991, and fall 1992, unpublished tabulations.

46. Pennsylvania Department of Education, Division of Data Services, *College and University Fall Enrollments 1991*, 4.

47. The Pennsylvania Department of Education data may differ from National Center for Education Statistics data because the Pennsylvania data covers only undergraduate students, not graduate and professional students or students attending privately licensed trade schools. In addition, NCES reports much higher numbers of African Americans at private two-year institutions than is reflected in the data presented by the Pennsylvania Higher Education Assistance Agency.

48. Kenneth Redd , "Trends in Black Students' College Enrollments and Participation Rates in Pennsylvania, 1980 to 1989," chapter in Pennsylvania Legislative Black Caucus, *The African-American Reality in Higher Education in Pennsylvania: Opportunities Denied! 1980-1990* (Harrisburg, PA: Pennsylvania Legislative Black Caucus, 1992)

49. Pennsylvania Department of Education, "Colleges and University Fall Enrollments 1990," p.188, and "Colleges and University Fall Enrollments 1991," p.189, (Harrisburg, PA: Pennsylvania Department of Education).

50. Pennsylvania Legislative Black Caucus, "The African-American Reality in Higher Education in Pennsylvania," 4.

51. Interview with Conrad Jones, chairman of the Black Caucus Advisory Committee on Higher Education also assistant vice president for Governmental Relations at Temple University, November 1992.

52. Judith Gill , "Enrollment Limits: A Response to Quality and Financial Concerns in Higher Education," *WICHE Reports* (Boulder, CO: Western Interstate Commission for Higher Education, September 1991), 1, and University of Wisconsin System, Office of Policy Analysis and Research, "Enrollment Management III: Planning for 1995 to 2000," background paper for Board of Regents, 1992, 3.

53. Ibid, 6.

54. Ibid, 6.

55. California Postsecondary Education Commission, Commission Comments on the Systems' Preliminary Funding Gap Reports, (Sacramento, CA: California Postsecondary Education Commission, 1992), 5.

56. California Assembly Committee on Higher Education, *Downsizing Our Future: Access to California Higher Education During Fiscal Decline* (Sacramento, CA: California Assembly Committee on Higher Education, 1992), 1.

57. California Postsecondary Education Commission, Commission Comments on the Systems' Preliminary Funding Gap Reports, (Sacramento, CA: California Postsecondary Education Commission, 1992), 3, 5, 8.

58. Interview with Gus Guichard, vice chancellor, government relations, California community colleges, December 1992.

59. Ibid.

60. Warren Fox, Meeting the Challenge: *Preparing for Long-Term Changes in California Higher Education* (Sacramento, CA: California Postsecondary Education Commission, 1992), 5.

61. California Assembly Committee on Higher Education, 10.

62. Fox, 7.

63. California Assembly Committee on Higher Education, 9.

64. *Commission Comments on the Systems' Preliminary Funding Gap Reports*, 11.

65. Ibid, 5, 8.

66. California Assembly Committee on Higher Education, 3-4.

67. Ibid, 1.

68. Gill, 1.

69. University of Wisconsin System, Office of Policy Analysis and Research, *Enrollment Management III: Planning for 1995 to 2000*, October 1992, 1.

70. Ibid, 3.

71. Ibid, 5.

72. University of Wisconsin System, Office of Policy Analysis and Research, Occasional Research Brief: May 1992 (Madison, WI: University of Wisconsin, 1992), 2.

73. *Enrollment Management III: Planning for 1995 to 2000*, 5.

74. Interview with Terry Dunn, senior policy and planning analyst, University of Wisconsin System, January 1993.

75. Interview with Michael Armstrong, planning director, Florida Board of Regents, January 1993.

76. Ibid.

77. Ibid.

78. Interview with Robert McCabe, president, Miami-Dade Community College, January 1993.

79. Ibid.

80. National Association of State Scholarship and Grant Programs, 45.

81. Interview with Michael Armstrong, December 1992.

82. Florida Board of Regents, "Student Data Coursefile," fall 1990, fall 1991, and fall 1992, unpublished tabulations.

Tables

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Table 1
High School Completion Rates and College Participation Rates by Race/Ethnicity, 1970 to 1991

Year	18-to-24-Year-Olds: All Persons (thousands)	18-to-24-Year-Olds: Enrolled-in-College Participation Rate (percent)	High School Graduates: Number Completed (thousands)	High School Graduates: Completion Rates (percent)	High School Graduates: Number Enrolled in College (thousands)	High School Graduates: Enrolled-in-College Participation Rate (percent)	14-to-24-Year-Olds: Ever-Enrolled-in-College Participation Rate (percent)
ALL RACES							
1970	22,552	25.7	17,768	78.8	5,805	32.7	52.3
1971	23,688	26.2	18,691	79.0	6,210	33.2	53.1
1972	24,579	25.5	19,618	79.8	6,257	31.9	52.9
1973	25,237	24.0	20,377	80.7	6,055	29.7	50.7
1974	25,670	24.6	20,725	80.7	6,316	30.5	51.3
1975	26,387	26.3	21,326	80.8	6,935	32.5	52.5
1976	26,919	26.7	21,677	80.5	7,181	33.1	53.4
1977	27,331	26.1	22,008	80.5	7,142	32.5	52.0
1978	27,547	25.3	22,309	80.7	6,995	31.4	51.4
1979	27,974	25.0	22,421	80.1	6,991	31.2	51.6
1980	28,957	25.6	23,413	80.9	7,400	31.6	51.1
1981	28,965	26.2	23,343	80.6	7,575	32.5	51.7
1982	28,846	26.6	23,291	80.7	7,678	33.0	52.7
1983	28,580	26.2	22,988	80.4	7,477	32.5	52.8
1984	28,031	27.1	22,870	81.6	7,591	33.2	53.0
1985	27,122	27.8	22,349	82.4	7,537	33.7	54.3
1986	26,512	28.2	21,768	82.1	7,477	34.3	55.0
1987	25,950	29.6	21,118	81.4	7,693	36.4	56.5
1988	25,733	30.3	20,900	81.2	7,791	37.3	57.5
1989	25,261	30.9	20,461	81.0	7,804	38.1	57.9
1990	24,852	32.0	20,311	82.3	7,964	39.1	58.9
1991	24,572	33.3	19,883	80.9	8,172	41.1	60.7
WHITE							
1970	19,608	27.1	15,960	81.4	5,305	33.2	53.4
1971	20,533	27.2	16,593	81.3	5,594	33.5	54.1
1972	21,315	26.4	17,410	81.7	5,624	32.3	53.9
1973	21,766	25.0	18,023	82.8	5,438	30.2	51.6
1974	22,141	25.2	18,318	82.7	5,589	30.5	51.7
1975	22,703	26.9	18,883	83.2	6,116	32.4	52.7
1976	23,119	27.1	19,045	82.4	6,276	33.0	53.5
1977	23,430	26.5	19,291	82.3	6,209	32.2	52.1
1978	23,650	25.7	19,526	82.6	6,077	31.1	51.3
1979	23,895	25.6	19,616	82.1	6,120	31.2	51.7
1980	24,482	26.2	20,214	82.6	6,423	31.8	51.4
1981	24,486	26.7	20,123	82.2	6,549	32.5	52.1
1982	24,206	27.2	19,944	82.4	6,694	33.1	53.1
1983	23,899	27.0	19,643	82.2	6,463	32.9	53.4
1984	23,347	28.0	19,373	83.0	6,256	33.7	53.8
1985	22,632	28.7	18,916	83.6	6,500	34.4	55.3
1986	22,020	28.6	18,291	83.1	6,307	34.5	55.5
1987	21,493	30.2	17,689	82.3	6,483	36.6	57.1
1988	21,261	31.3	17,491	82.3	6,659	38.1	58.6
1989	20,825	31.8	17,089	82.1	6,631	38.8	58.9
1990	20,393	32.5	16,823	82.5	6,635	39.4	60.1
1991	19,980	34.1	16,324	81.7	6,813	41.7	62.3

Continued on next page

Source: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports, School Enrollment—Social and Economic Characteristics of Students: October 1990*, Series P-20, No. 460, and unpublished tabulations for October 1991.

Note: College participation rates were calculated using the total population and high school graduates as the bases. The ever-enrolled-in-college participation rate includes 14-to-24-year-olds who were either enrolled in college or had completed one or more years of college. The high school completion rates were calculated using the total population as the base. Thus, in 1970, 78.8 percent of the total population 18 to 24 years old had earned a high school diploma or a high school equivalency certificate or were enrolled in college. Data for 1980 and later use 1980 census-based estimates. Data for 1986 and later use a revised tabulation system. Improvements in edits and population estimation procedures caused slight changes in estimates for 1986.

Table 1 - *Continued*

High School Completion Rates and College Participation Rates by Race/Ethnicity, 1970 to 1991

Year	18-to-24-Year-Olds						14-to-24-Year-Olds
			High School Graduates				
	All Persons (thousands)	Enrolled-in-College Participation Rate (percent)	Number Completed (thousands)	Completion Rates (percent)	Number Enrolled in College (thousands)	Enrolled-in-College Participation Rate (percent)	Ever-Enrolled-in-College Participation Rate (percent)
AFRICAN AMERICAN							
1970	2,692	15.5	1,602	59.5	416	26.0	39.4
1971	2,866	18.2	1,789	62.4	522	29.2	42.3
1972	2,986	18.1	1,992	66.7	540	27.1	42.0
1973	3,114	16.0	2,079	66.8	498	24.0	41.6
1974	3,105	17.9	2,083	67.1	555	26.6	44.8
1975	3,213	20.7	2,081	64.8	665	32.0	48.1
1976	3,315	22.6	2,239	67.5	749	33.5	50.4
1977	3,387	21.3	2,286	67.5	721	31.5	46.9
1978	3,452	20.1	2,340	67.8	694	29.7	47.8
1979	3,510	19.8	2,356	67.1	696	29.5	48.4
1980	3,721	19.2	2,592	69.7	715	27.6	45.9
1981	3,778	19.9	2,678	70.9	750	28.0	44.8
1982	3,872	19.8	2,744	70.9	767	28.0	45.5
1983	3,865	19.2	2,740	70.9	741	27.0	45.0
1984	3,862	20.4	2,885	74.7	786	27.2	45.2
1985	3,716	19.8	2,810	75.6	734	26.1	43.8
1986	3,653	22.2	2,795	76.5	812	29.1	47.8
1987	3,603	22.8	2,739	76.0	823	30.0	48.7
1988	3,568	21.1	2,680	75.1	752	28.1	46.6
1989	3,559	23.5	2,708	76.1	835	30.8	49.1
1990	3,520	25.4	2,710	77.0	894	33.0	48.0
1991	3,504	23.6	2,630	75.1	828	31.5	46.1
HISPANIC[a]							
1972	1,338	13.4	694	51.9	179	25.8	36.7
1973	1,285	16.0	709	55.2	206	29.1	43.0
1974	1,506	18.1	842	55.9	272	32.3	47.8
1975	1,446	20.4	832	57.5	295	35.5	50.8
1976	1,551	19.9	862	55.6	309	35.8	48.9
1977	1,609	17.2	880	54.7	277	31.5	43.8
1978	1,672	15.2	935	55.9	254	27.2	43.2
1979	1,754	16.6	968	55.2	292	30.2	45.7
1980	2,033	16.1	1,099	54.1	327	29.8	47.3
1981	2,052	16.7	1,144	55.8	342	29.9	45.8
1982	2,001	16.8	1,153	57.6	337	29.2	47.3
1983	2,025	17.2	1,110	54.8	349	31.4	48.4
1984	2,018	17.9	1,212	60.1	362	29.9	46.0
1985	2,221	16.9	1,396	62.9	375	26.9	46.7
1986	2,514	18.2	1,507	59.9	458	30.4	45.6
1987	2,592	17.6	1,597	61.6	455	28.5	44.2
1988	2,642	17.0	1,458	55.2	450	30.9	47.1
1989	2,818	16.1	1,576	55.9	453	28.7	43.6
1990	2,749	15.8	1,498	54.5	435	29.0	44.7
1991	2,874	18.0	1,498	52.1	516	34.4	47.6

[a] Hispanics may be of any race. Data before 1972 are unavailable for Hispanics.

Table 2
High School Completion Rates and College Participation Rates by Race/Ethnicity and Sex, 1970 to 1991

Year	18-to-24-Year-Olds: All Persons (thousands)	18-to-24-Year-Olds: Enrolled-in-College Participation Rate (percent)	High School Graduates: Number Completed (thousands)	High School Graduates: Completion Rates (percent)	High School Graduates: Number Enrolled in College (thousands)	High School Graduates: Enrolled-in-CollegeParticipation Rate (percent)	14-to-24-Year-Olds: Ever-Enrolled-in-College Participation Rate (percent)
ALL RACES							
MEN							
1970	10,385	32.1	8,087	77.9	3,331	41.2	59.2
1971	11,092	32.4	8,669	78.2	3,599	41.5	60.1
1972	11,712	30.2	9,247	79.0	3,534	38.2	59.0
1973	12,111	27.7	9,716	80.2	3,360	34.6	55.4
1974	12,315	27.7	9,835	79.9	3,411	34.7	55.6
1975	12,724	29.0	10,214	80.3	3,693	36.2	56.1
1976	13,012	28.2	10,312	79.2	3,673	35.6	55.7
1977	13,218	28.1	10,440	79.0	3,712	35.6	54.2
1978	13,385	27.1	10,614	79.3	3,621	34.1	52.6
1979	13,571	25.8	10,657	78.5	3,508	32.9	52.4
1980	14,107	26.3	11,125	78.9	3,717	33.4	51.4
1981	14,127	27.1	11,052	78.2	3,833	34.7	52.1
1982	14,083	27.2	11,120	79.0	3,837	34.5	53.0
1983	14,003	27.3	10,906	77.9	3,820	35.0	52.7
1984	13,744	28.6	10,914	79.4	3,929	36.0	53.6
1985	13,199	28.4	10,614	80.4	3,749	35.3	54.6
1986	12,921	28.7	10,338	80.0	3,702	35.8	54.4
1987	12,626	30.6	10,030	79.4	3,867	38.6	56.3
1988	12,491	30.2	9,832	78.7	3,770	38.3	56.6
1989	12,325	30.2	9,700	78.7	3,717	38.3	57.2
1990	12,134	32.3	9,778	80.6	3,922	40.1	58.0
1991	12,036	32.9	9,493	78.9	3,954	41.7	59.2
WOMEN							
1970	12,167	20.3	9,680	79.6	2,474	25.6	46.6
1971	12,576	20.8	10,020	79.7	2,610	26.0	47.1
1972	12,867	21.2	10,371	80.6	2,724	26.3	47.4
1973	13,126	20.5	10,663	81.2	2,696	25.3	46.5
1974	13,355	21.8	10,889	81.5	2,905	26.7	47.5
1975	13,663	23.7	11,113	81.3	3,243	29.2	49.2
31976	13,907	25.2	11,365	81.7	3,508	30.9	51.4
1977	14,113	24.3	11,569	82.0	3,431	29.7	50.0
1978	14,262	23.7	11,694	82.0	3,373	28.8	50.3
1979	14,403	24.2	11,763	81.7	3,482	29.6	50.8
1980	14,851	24.8	12,287	82.7	3,682	30.0	50.8
1981	14,838	25.2	12,290	82.8	3,741	30.4	51.3
1982	14,763	26.0	12,171	82.4	3,841	31.6	52.4
1983	14,577	25.1	12,082	82.9	3,657	30.3	52.8
1984	14,287	25.6	11,956	83.7	3,662	30.6	52.4
1985	13,923	27.2	11,736	84.3	3,788	32.3	54.0
1986	13,591	27.8	11,430	84.1	3,775	33.0	55.5
1987	13,324	28.7	11,086	83.2	3,826	34.5	56.7
1988	13,242	30.4	11,068	83.6	4,021	36.3	58.3
1989	12,936	31.6	10,758	83.2	4,085	38.0	58.6
1990	12,718	31.8	10,533	82.8	4,042	38.4	59.8
1991	12,536	33.6	10,391	82.9	4,218	41.0	62.1

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Source: U.S. Department of Commerce, Bureau of the Census, *Current Population Reports, School Enrollment—Social and Economic Characteristics of Students*: October 1990, Series P-20, No. 460, and unpublished tabulations for October 1991.

Note: The number of high school graduates was calculated by adding the number of individuals in this age group enrolled in college as of October of that year and the number of high school graduates not enrolled in college; these figures include individuals who enrolled in college without receiving a high school diploma or a GED. Data for 1980 and later use 1980 census-based estimates. Data for 1986 and later use a revised tabulation system. Improvements in edits and population estimation procedures caused slight changes in the estimates for 1986.

Table 2 - *Continued*

High School Completion Rates and College Participation Rates by Race/Ethnicity and Sex, 1970 to 1991

Year	18-to-24-Year-Olds						14-to-24-Year-Olds
			High School Graduates				
	All Persons (thousands)	Enrolled-in-College Participation Rate (percent)	Number Completed (thousands)	Completion Rates (percent)	Number Enrolled in College (thousands)	Enrolled-in-College Participation Rate (percent)	Ever-Enrolled-in-College Participation Rate (percent)
WHITE							
MEN							
1970	9,053	34.2	7,324	80.9	3,096	42.3	60.9
1971	9,653	34.0	7,807	80.9	3,284	42.1	61.4
1972	10,212	31.3	8,278	81.1	3,195	38.6	60.1
1973	10,511	28.8	8,637	82.2	3,032	35.1	56.5
1974	10,722	28.3	8,766	81.8	3,035	34.6	55.9
1975	11,050	30.1	9,139	82.7	3,326	36.4	56.6
1976	11,279	28.8	9,186	81.4	3,250	35.4	55.9
1977	11,445	28.7	9,263	80.9	3,286	35.5	54.5
1978	11,572	27.6	9,438	81.6	3,195	33.9	52.5
1979	11,721	26.5	9,457	80.7	3,104	32.8	52.7
1980	12,011	27.3	9,686	80.6	3,275	33.8	51.8
1981	12,040	27.7	9,619	79.9	3,340	34.7	52.8
1982	11,874	27.9	9,611	80.9	3,308	34.4	53.2
1983	11,787	28.3	9,411	79.8	3,335	35.4	53.5
1984	11,521	29.6	9,348	81.1	3,406	36.4	54.2
1985	11,108	29.3	9,077	81.7	3,254	35.8	55.5
1986	10,814	29.3	8,780	81.2	3,168	36.1	55.1
1987	10,549	31.2	8,498	80.6	3,289	38.7	56.7
1988	10,380	31.4	8,268	79.7	3,260	39.4	57.9
1989	10,240	31.5	8,177	79.9	3,223	39.4	58.5
1990	10,053	32.7	8,157	81.1	3,292	40.3	58.7
1991	9,896	33.0	7,843	79.3	3,270	41.9	59.9
WOMEN							
1970	10,555	20.9	8,634	81.8	2,209	25.6	47.2
1971	10,880	21.2	8,887	81.7	2,310	26.0	47.7
1972	11,103	21.9	9,132	82.2	2,428	26.6	48.3
1973	11,255	21.4	9,387	83.4	2,406	25.6	47.1
1974	11,419	22.4	9,551	83.6	2,555	26.8	47.8
1975	11,653	23.9	9,743	83.6	2,790	28.6	49.1
1976	11,840	25.6	9,860	83.3	3,026	30.7	51.3
1977	11,985	24.4	10,029	83.7	2,923	29.1	50.0
1978	12,078	23.9	10,088	83.5	2,882	28.6	50.3
1979	12,174	24.8	10,157	83.4	3,015	29.7	50.8
1980	12,471	25.2	10,528	84.4	3,147	29.9	50.9
1981	12,446	25.8	10,504	84.4	3,208	30.5	51.6
1982	12,332	26.6	10,333	83.8	3,285	31.8	52.9
1983	12,112	25.8	10,233	84.5	3,129	30.6	53.4
1984	11,826	26.4	10,026	84.8	3,120	31.1	53.4
1985	11,524	28.2	9,840	85.4	3,247	33.0	55.2
1986	11,205	28.0	9,509	84.9	3,139	33.0	55.8
1987	10,944	29.2	9,189	84.0	3,192	34.7	57.5
1988	10,881	31.2	9,223	84.8	3,399	36.9	59.2
1989	10,586	32.2	8,913	84.2	3,409	38.2	59.2
1990	10,340	32.3	8,666	83.8	3,344	38.6	61.4
1991	10,119	35.0	8,481	83.8	3,544	42.1	64.5

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Table 2 - *Continued*

High School Completion Rates and College Participation Rates by Race/Ethnicity and Sex, 1970 to 1991

Year	18-to-24-Year-Olds: All Persons (thousands)	18-to-24-Year-Olds: Enrolled-in-College Participation Rate (percent)	High School Graduates: Number Completed (thousands)	High School Graduates: Completion Rates (percent)	High School Graduates: Number Enrolled in College (thousands)	High School Graduates: Enrolled-in-College Participation Rate (percent)	14-to-24-Year-Olds: Ever-Enrolled-in-College Participation Rate (percent)
AFRICAN AMERICAN							
MEN							
1970	1,220	15.7	668	54.8	192	28.7	41.4
1971	1,318	19.9	769	58.3	262	34.1	45.8
1972	1,373	20.9	870	63.4	287	33.0	47.4
1973	1,434	18.5	952	66.4	266	27.9	44.2
1974	1,396	20.1	919	65.8	280	30.5	47.3
1975	1,451	20.3	897	61.8	294	32.8	50.5
1976	1,503	22.0	936	62.3	331	35.4	50.3
1977	1,528	20.2	970	63.5	309	31.9	47.6
1978	1,554	19.6	956	61.5	305	31.9	49.3
1979	1,577	19.3	973	61.7	304	31.2	46.7
1980	1,690	17.3	1,115	66.0	293	26.3	44.1
1981	1,730	18.8	1,154	66.7	325	28.2	42.3
1982	1,786	18.5	1,171	65.6	331	28.3	44.5
1983	1,807	18.3	1,202	66.5	331	27.5	43.6
1984	1,811	20.3	1,272	70.2	367	28.9	45.2
1985	1,720	20.1	1,244	72.3	345	27.7	43.6
1986	1,687	20.7	1,220	72.3	349	28.6	44.4
1987	1,666	22.6	1,188	71.3	377	31.7	48.3
1988	1,653	18.0	1,189	71.9	297	25.0	42.8
1989	1,654	19.6	1,195	72.2	324	27.1	45.8
1990	1,634	26.1	1,240	75.9	426	34.4	48.9
1991	1,635	23.1	1,174	71.8	378	32.2	47.3
WOMEN							
1970	1,471	15.3	935	63.6	225	24.1	39.3
1971	1,547	16.7	1,019	65.9	259	25.4	39.8
1972	1,613	15.7	1,123	69.6	253	22.5	37.9
1973	1,681	13.7	1,125	66.9	231	20.5	39.4
1974	1,709	16.2	1,167	68.3	277	23.7	42.9
1975	1,761	21.1	1,182	67.1	372	31.5	46.4
1976	1,813	23.0	1,302	71.8	417	32.0	50.3
1977	1,859	22.2	1,317	70.8	413	31.4	46.2
1978	1,897	20.6	1,384	73.0	390	28.2	46.7
1979	1,934	20.3	1,383	71.5	392	28.3	49.8
1980	2,031	20.8	1,475	72.6	422	28.6	47.4
1981	2,049	20.7	1,526	74.5	424	27.8	46.6
1982	2,086	20.9	1,572	75.4	436	27.7	46.3
1983	2,058	20.0	1,539	74.8	411	26.7	46.3
1984	2,052	20.4	1,613	78.6	419	26.0	45.1
1985	1,996	19.5	1,565	78.4	389	24.9	44.0
1986	1,966	23.5	1,576	80.1	462	29.4	50.4
1987	1,937	23.0	1,550	80.0	445	28.7	48.9
1988	1,915	23.8	1,492	77.9	455	30.5	49.6
1989	1,905	26.8	1,511	79.3	511	33.8	51.8
1990	1,886	24.8	1,468	77.8	467	31.8	47.3
1991	1,869	24.1	1,455	77.8	460	30.9	45.2

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Table 2 - *Continued*

High School Completion Rates and College Participation Rates by Race/Ethnicity and Sex, 1970 to 1991

Year	18-to-24-Year-Olds						14-to-24-Year-Olds
			High School Graduates				
	All Persons (thousands)	Enrolled-in-College Participation Rate (percent)	Number Completed (thousands)	Completion Rates (percent)	Number Enrolled in College (thousands)	Enrolled-in-College Participation Rate (percent)	Ever-Enrolled-in-College Participation Rate (percent)
HISPANIC [a]							
MEN							
1972	609	15.1	301	49.4	92	30.6	44.3
1973	625	16.8	348	55.7	105	30.2	45.4
1974	720	19.6	390	54.2	141	36.2	51.4
1975	678	21.4	383	56.5	145	37.9	55.4
1976	701	21.4	378	53.9	150	39.7	51.8
1977	754	18.4	396	52.5	139	35.1	46.5
1978	781	16.1	420	53.8	126	30.0	46.3
1979	837	18.3	454	54.2	153	33.7	49.5
1980	1,012	15.8	518	51.2	160	30.9	49.5
1981	988	16.6	498	50.4	164	32.9	48.6
1982	944	14.9	519	55.0	141	27.2	44.8
1983	968	15.7	476	49.2	152	31.9	47.4
1984	956	16.1	549	57.4	154	28.1	45.7
1985	1,132	14.8	659	58.2	168	25.5	44.9
1986	1,339	17.4	769	57.4	233	30.3	44.4
1987	1,337	18.5	795	59.5	247	31.1	45.1
1988	1,375	16.6	724	52.7	228	31.5	48.4
1989	1,439	14.7	756	52.5	211	27.9	42.7
1990	1,403	15.3	753	53.7	214	28.4	46.5
1991	1,503	14.0	719	47.8	211	29.3	42.2
WOMEN							
1972	728	12.1	394	54.1	88	22.3	31.1
1973	658	15.5	362	55.0	102	28.2	41.1
1974	786	16.4	451	57.4	129	28.6	43.4
1975	769	19.5	449	58.4	150	33.4	46.7
1976	850	18.8	483	56.8	160	33.1	46.5
1977	855	16.3	483	56.5	139	28.8	41.6
1978	891	14.4	516	57.9	128	24.8	40.0
1979	917	15.3	516	56.3	140	27.1	42.3
1980	1,021	16.2	579	56.7	165	28.5	45.4
1981	1,064	16.7	646	60.7	178	27.6	43.4
1982	1,056	18.6	634	60.0	196	30.9	49.2
1983	1,057	18.7	634	60.0	198	31.2	49.7
1984	1,061	19.5	661	62.3	207	31.3	46.6
1985	1,091	18.8	734	67.3	205	27.9	48.0
1986	1,175	19.2	739	62.9	226	30.6	46.8
1987	1,256	16.6	801	63.8	208	26.0	43.2
1988	1,267	17.7	736	58.1	224	30.4	46.0
1989	1,377	17.7	823	59.8	244	29.6	44.5
1990	1,346	16.4	745	55.3	221	29.7	43.0
1991	1,372	22.2	780	56.9	305	39.1	52.4

[a] Hispanics may be of any race. Data prior to 1972 are unavailable for Hispanics.

Table 3
Public High School Graduates by Region, 1985-86 to 1994-95

								Projections		
	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
SOUTH/SOUTH CENTRAL TOTAL	735,130	753,880	780,060	787,380	751,190	725,420	716,650	723,720	713,830	739,700
White	511,790	528,450	547,560	545,560	509,090	486,570	478,050	476,850	468,080	484,810
Total Minority	223,340	225,430	232,500	241,820	242,100	238,850	238,600	246,870	245,750	254,890
African American	163,960	163,720	168,540	171,810	167,410	162,290	158,660	162,230	159,600	165,960
Hispanic	46,500	48,490	49,590	54,250	58,450	59,930	63,090	67,220	68,070	70,050
Asian American[a]	7,930	8,570	9,530	10,610	11,220	11,680	11,990	12,650	13,140	13,590
American Indian[b]	4,950	4,650	4,840	5,150	5,020	4,950	4,860	4,770	4,940	5,290
WEST TOTAL	447,770	464,990	488,770	480,480	451,420	445,210	454,390	468,480	480,050	505,150
White	317,960	328,500	342,560	330,250	301,350	289,050	289,890	293,330	298,910	314,100
Total Minority	129,810	136,490	146,210	150,230	150,070	156,160	164,500	175,150	181,140	191,050
African American	23,580	24,500	25,360	24,830	22,590	22,010	22,190	23,210	23,460	24,710
Hispanic	61,250	64,270	68,000	72,240	73,100	78,090	84,540	91,900	95,150	101,350
Asian American[a]	36,740	39,210	44,010	44,380	46,070	47,620	49,140	51,250	53,610	55,420
American Indian[b]	8,240	8,510	8,840	8,780	8,310	8,440	8,630	8,790	8,920	9,570
NORTH CENTRAL TOTAL	654,660	653,290	674,660	663,600	613,190	580,230	571,310	583,120	573,930	598,880
White	574,040	572,700	588,780	574,920	529,730	499,760	491,760	500,670	491,990	513,860
Total Minority	80,620	80,590	85,880	88,680	83,460	80,470	79,550	82,450	81,940	85,020
African American	60,320	59,370	62,800	64,240	59,290	56,230	54,000	56,070	54,680	56,950
Hispanic	10,670	10,900	11,940	12,630	12,590	12,330	13,250	13,650	14,460	15,060
Asian American[a]	6,730	7,380	8,190	8,620	8,670	9,090	9,450	9,770	9,920	10,010
American Indian[b]	2,900	2,940	2,950	3,190	2,910	2,820	2,850	2,960	2,880	3,000
NORTHEAST TOTAL	553,860	553,500	561,610	535,090	492,970	464,830	454,620	452,790	449,490	463,810
White	452,370	451,120	455,680	431,470	392,630	367,350	357,960	351,820	346,570	356,620
Total Minority	101,490	102,380	105,930	103,620	100,340	97,480	96,660	100,970	102,920	107,190
African American	68,500	67,650	69,130	65,810	61,860	58,420	56,620	58,010	58,040	60,500
Hispanic	21,630	22,170	23,280	22,840	22,610	22,560	22,860	24,800	25,860	26,820
Asian American[a]	10,700	11,840	12,810	14,080	15,000	15,630	16,260	17,290	18,210	19,070
American Indian[b]	660	720	710	890	870	870	920	870	810	800
ALL REGIONS	2,391,380	2,425,640	2,505,070	2,466,540	2,308,770	2,215,690	2,196,950	2,228,100	2,217,300	2,307,540
White	1,856,150	1,880,760	1,934,570	1,882,200	1,732,810	1,642,730	1,617,650	1,622,660	1,605,550	1,669,380
Total Minority	535,230	544,880	570,500	584,340	575,960	572,960	579,300	605,440	611,750	638,160
African American	316,350	315,240	325,820	326,690	311,150	298,950	291,460	299,520	295,780	308,120
Hispanic	140,040	145,830	152,800	161,960	166,750	172,910	183,740	197,560	203,540	213,290
Asian American[a]	62,090	66,990	74,540	77,680	80,950	84,020	86,840	90,960	94,890	98,090
American Indian[b]	16,750	16,820	17,340	18,010	17,110	17,080	17,260	17,400	17,540	18,660

Source: Western Interstate Commission for Higher Education and The College Board, *The Road to College: Educational Process by Race and Ethnicity*. Boulder, CO: Western Interstate Commisison for Higher Education, July 1991.

[a] Asian American includes Pacific Islanders.

[b] American Indian includes Alaskan Natives.

Table 4

Total Enrollment in Higher Education by Type of Institution and Race/Ethnicity: Fall 1980 to 1991

(Numbers in Thousands)

	1980	1982	1984	1986	1988	1990	1991	Percent Change 1990-91
ALL INSTITUTIONS	12,087	12,388	12,235	12,504	13,043	13,820	14,359	3.9
White (non-Hispanic)	9,833	9,997	9,815	9,921	10,283	10,723	10,990	2.5
Total Minority	1,949	2,059	2,085	2,238	2,400	2,706	2,953	9.1
African American (non-Hispanic)	1,107	1,101	1,076	1,082	1,130	1,247	1,335	7.1
Hispanic	472	519	535	618	680	783	867	10.7
Asian American[a]	286	351	390	448	497	573	637	11.2
American Indian[b]	84	88	84	90	93	103	114	10.7
Nonresident Alien	305	331	335	345	361	391	416	6.4
FOUR-YEAR INSTITUTIONS	7,565	7,648	7,708	7,824	8,175	8,579	8,707	1.5
White (non-Hispanic)	6,275	6,306	6,301	6,337	6,582	6,769	6,791	0.3
Total Minority	1,050	1,073	1,124	1,195	1,292	1,486	1,573	5.9
African American (non-Hispanic)	634	612	617	615	656	723	758	4.8
Hispanic	217	229	246	278	296	358	383	7.0
Asian American[a]	162	193	223	262	297	357	381	6.7
American Indian[b]	37	39	38	40	42	48	51	6.3
Nonresident Alien	241	270	282	292	302	324	343	5.9
TWO-YEAR INSTITUTIONS	4,521	4,740	4,527	4,680	4,868	5,240	5,652	7.9
White (non-Hispanic)	3,558	3,692	3,514	3,584	3,702	3,954	4,199	6.2
Total Minority	899	987	961	1,043	1,107	1,218	1,381	13.4
African American (non-Hispanic)	472	489	459	467	473	524	578	10.3
Hispanic	255	291	289	340	384	424	484	14.2
Asian American[a]	124	158	167	186	199	215	256	19.1
American Indian[b]	47	49	46	51	50	55	63	14.5
Nonresident Alien	64	61	53	53	60	67	74	10.4

Source: U.S. Department of Education, National Center for Education Statistics. *Trends in Enrollment in Higher Education by Racial/Ethnic Category: Fall 1980 through Fall 1991*. Washington, D.C.: U.S. Department of Education, January 1993.

Note Because of underreporting/nonreporting of racial/ethnic data, data prior to 1986 were estimated when possible. Also, due to rounding, detail may not add to totals. Data for fall 1990 have been revised from previously published figures. For fall of 1991, the response rate was 90.9 percent for institutions of higher education while in the fall of 1990, the response rate for institutions of higher education was 86.8 percent. Imputed enrollment data (for nonresponding institutions and cases with incomplete data) accounted for on average less than 3.5 percent of the enrollment data for four year institutions and are substantially higher (approximately 24 percent) for two-year institutions.

[a] Asian American includes Pacific Islanders.

[b] American Indian includes Alaskan Natives.

Table 5
Total Enrollment in Higher Education by Control of Institution, Race/Ethnicity, and Sex: Fall 1980 to 1991

(Numbers in Thousands)

	1980	1982	1984	1986	1988	1990	1991	Percent Change 1990-91
MEN	5,868	5,999	5,859	5,885	5,998	6,284	6,502	3.5
White (non-Hispanic)	4,773	4,830	4,690	4,647	4,712	4,861	4,962	2.1
Total Minority	885	939	939	1,004	1,051	1,177	1,281	8.8
African American (non-Hispanic)	464	458	437	436	443	485	517	6.5
Hispanic	232	252	254	290	310	354	391	10.5
Asian American[a]	151	189	210	239	259	295	325	10.2
American Indian[b]	38	40	38	39	39	43	48	11.6
Nonresident Alien	211	230	231	233	235	246	259	5.3
WOMEN	6,219	6,389	6,376	6,619	7,045	7,535	7,857	4.3
White (non-Hispanic)	5,060	5,167	5,125	5,273	5,572	5,862	6,028	2.8
Total Minority	1,064	1,121	1,146	1,234	1,347	1,529	1,672	9.4
African American (non-Hispanic)	643	644	639	646	687	762	818	7.3
Hispanic	240	267	281	328	370	429	476	11.0
Asian American[a]	135	162	180	209	237	278	312	12.2
American Indian[b]	46	48	46	51	53	60	66	10.0
Nonresident Alien	94	101	104	112	126	145	157	8.3
PUBLIC	9,456	9,695	9,458	9,714	10,156	10,845	11,310	4.3
White (non-Hispanic)	7,656	7,785	7,543	7,654	7,964	8,385	8,622	4.3
Total Minority	1,596	1,692	1,695	1,836	1,955	2,198	2,411	9.7
African American (non-Hispanic)	876	873	844	854	881	976	1,053	7.9
Hispanic	406	446	456	532	587	671	742	10.6
Asian American[a]	240	296	323	371	406	461	516	11.9
American Indian[b]	74	77	72	79	81	90	100	11.1
Nonresident Alien	204	219	219	224	238	260	275	5.8
INDEPENDENT	2,630	2,693	2,777	2,790	2,887	2,975	3,049	2.5
White (non-Hispanic)	2,177	2,212	2,272	2,267	2,319	2,338	2,368	1.3
Total Minority	354	367	389	402	443	506	542	7.1
African American (non-Hispanic)	231	228	232	228	248	271	282	4.1
Hispanic	66	74	79	86	93	111	125	12.6
Asian American[a]	47	55	67	77	91	112	121	8.0
American Indian[b]	10	10	11	11	11	12	14	16.7
Nonresident Alien	101	113	116	120	123	131	141	7.6

Source: U.S. Department of Education, National Center for Education Statistics, *Trends in Enrollment in Higher Education by Racial Ethnic Category: Fall 1980 through Fall 1991*. Washington, D.C.: U.S. Department of Education, January 1993.

Note Because of underreporting/nonreporting of racial/ethnic data, data prior to 1986 were estimated when possible. Also, due to rounding, detail may not add to totals. Data for fall 1990 have been revised from previously published figures. For fall of 1991, the response rate was 90.9 percent for institutions of higher education while in the fall of 1990, the response rate for institutions of higher education was 86.8 percent.

[a] Asian American includes Pacific Islanders.

[b] American Indian includes Alaskan Natives.

Table 6
Undergraduate, Graduate, and Professional School Enrollment in Higher Education by Race/Ethnicity: Fall 1980 to 1991

(Numbers in Thousands)

	1980	1982	1984	1986	1988	1990	1991	Percent Change 1990-91
UNDERGRADUATE TOTAL	10,560	10,875	10,610	10,798	11,304	11,959	12,439	4.0
White (non-Hispanic)	8,556	8,749	8,484	8,558	8,907	9,273	9,508	2.5
Total Minority	1,797	1,907	1,911	2,036	2,192	2,468	2,698	9.3
African American (non-Hispanic)	1,028	1,028	996	996	1,039	1,147	1,229	7.1
Hispanic	438	485	496	563	631	725	804	10.9
Asian American[a]	253	313	343	393	437	501	559	11.6
American Indian[b]	79	82	78	83	86	95	106	11.6
Nonresident Alien	208	220	216	205	205	219	234	6.8
GRADUATE TOTAL	1,250	1,235	1,344	1,435	1,472	1,586	1,639	3.3
White (non-Hispanic)	1,030	1,002	1,087	1,133	1,153	1,228	1,258	2.4
Total Minority	125	123	141	167	167	190	205	7.9
African American (non-Hispanic)	66	61	67	72	76	84	89	6.0
Hispanic	27	27	32	46	39	47	51	8.5
Asian American[a]	28	30	37	43	46	53	58	9.4
American Indian[b]	4	5	5	5	6	6	7	16.7
Nonresident Alien	94	108	115	136	151	167	177	6.0
PROFESSIONAL SCHOOL TOTAL	277	278	278	270	267	274	281	2.6
White (non-Hispanic)	248	246	243	231	223	222	224	0.9
Total Minority	26	29	32	36	39	47	50	6.4
African American (non-Hispanic)	13	13	13	14	14	16	17	6.3
Hispanic	7	7	8	9	9	11	11	0.0
Asian American[a]	6	8	9	11	14	19	21	10.5
American Indian[b]	1	1	1	1	1	1	1	0.0
Nonresident Alien	3	3	3	4	5	5	6	20.0

Source: U.S. Department of Education, National Center for Education Statistics, *Trends in Enrollment in Higher Education by Racial Ethnic Category: Fall 1980 through Fall 1991*. Washington, D.C.: U.S. Department of Education, January 1993.

Note: Because of underreporting/nonreporting of racial/ethnic data, data prior to 1986 were estimated when possible. Also, due to rounding, detail may not add to totals. Data for fall 1990 have been revised from previously published figures. For fall of 1991, the response rate was 90.9 percent for institutions of higher education while in the fall of 1990, the response rate for institutions of higher education was 86.8 percent.

[a] Asian American includes Pacific Islanders.

[b] American Indian includes Alaskan Natives.

Table 7
Enrollment in Historically Black Colleges and Universities by Race/Ethnicity: Fall 1980 to 1991

	1980	1982	1984	1986	1987	1988	1989	1990	1991	Percent Change 1990-91
Number of HBCUs[a]	102	100	104	104	104	106	104	104	102	
Total Enrollment	222,220	216,570	216,050	213,114	217,670	230,758	238,946	248,697	258,509	3.9
African American (non-Hispanic)	185,780	177,000	175,110	176,610	182,020	192,848	199,974	207,547	213,904	3.1
White (non-Hispanic)	21,480	23,040	23,450	22,784	23,227	25,767	26,962	29,601	31,085	5.0
Asian American[b]	1,340	1,050	1,350	1,207	1,187	1,473	1,568	1,724	2,009	16.5
Hispanic	1,030	1,070	1,560	1,486	1,590	1,746	1,859	1,797	2,131	18.6
American Indian[c]	400	570	240	482	449	254	307	338	388	14.8
Nonresident Alien	12,200	13,840	14,340	10,545	8,897	8,671	8,273	7,690	7,489	-2.6

Sources: Hill, Susan T. *The Traditionally Black Institutions of Higher Education, 1860 to 1982*. Washington, D.C.: Government Printing Office, 1984.
National Association for Equal Opportunity Research Institute staff analysis of the U.S. Department of Education, Office for Civil Rights unpublished data, Fall 1984, and 1986-1991.

Note: Details may not add to total because of rounding.

[a] These figures represent the number of institutions reporting their enrollment each year.

[b] Asian American includes Pacific Islanders.

[c] American Indian includes Alaskan Natives.

Table 8
African American Enrollment in Historically Black Colleges and Universities by Control of Insititution and Sex, Fall 1980 to 1991

	1986	1987	1988	1989	1990	1991	Percent Change 1990-91
NUMBER OF HBCUs	104	104	106	104	104	102	
ALL HBCUs	176,610	182,020	192,848	199,974	207,547	213,904	3.1
Men	73,495	74,447	77,741	79,462	82,587	87,713	3.8
Women	103,115	107,573	115,107	120,512	124,960	128,191	2.6
PUBLIC HBCUs	120,930	124,749	132,067	137,190	143,763	150,707	4.8
Men	50,592	51,177	53,206	54,400	57,070	60,147	5.4
Women	70,338	73,572	78,861	82,790	86,693	90,560	4.5
INDEPENDENT HBCUs	55,680	57,271	60,781	62,784	63,784	63,197	-0.9
Men	22,903	23,270	24,535	25,062	25,517	25,566	0.2
Women	32,777	34,001	36,246	37,722	38,267	37,631	-1.7

Source: National Association for Equal Opportunity in Higher Education Research Institute Annual Fall Enrollment Survey: 1986-1991.

Table 9
Associate's Degrees by Race/Ethnicity and Sex for Selected Years

	1985		1987		1989[e]		1990		Percent Change
	Total	Percent	Total	Percent	Total	Percent	Total	Percent	1989-90
Total	429,815	100.0	436,299	100.0	432,144	100.0	448,997	100.0	3.9
Men[a]	190,409	44.3	190,832	43.7	183,963	42.6	188,160	41.9	2.3
Women[b]	239,406	55.7	245,467	56.3	248,181	57.4	260,837	58.1	5.1
White (non-Hispanic)	355,343	82.7	361,819	82.9	354,813	82.1	368,529	82.1	3.9
Men	157,278	82.6	158,126	82.9	150,950	82.1	154,301	82.0	2.2
Women	198,065	82.7	203,693	83.0	203,863	82.1	214,228	82.1	5.1
Minority	68,065	15.8	69,792	16.0	64,624	15.0	67,851	15.1	5.0
Men	29,435	15.5	30,146	15.8	23,480	12.8	24,447	13.0	4.1
Women	38,630	16.1	39,646	16.2	41,144	16.6	43,404	16.6	5.5
Hispanic	19,407	4.5	19,345	4.4	20,381	4.7	22,062	4.9	8.2
Men	8,561	4.5	8,764	4.6	9,212	5.0	9,810	5.2	6.5
Women	10,846	4.5	10,581	4.3	11,169	4.5	122,252	4.7	9.7
African American (non-Hispanic)	35,799	8.3	35,457	8.1	34,722	8.0	35,278	7.9	1.6
Men	14,192	7.5	13,947	7.3	12,913	7.0	13,171	7.0	2.0
Women	21,607	9.0	21,510	8.8	21,809	8.8	22,107	8.5	1.4
Asian American[c]	9,914	2.3	11,794	2.7	12,531	2.9	13,426	3.0	7.1
Men	5,492	2.9	6,172	3.2	6,375	3.5	6,470	3.4	1.5
Women	4,422	1.8	5,622	2.3	6,156	2.5	6,956	2.7	13.0
American Indian[d]	2,953	0.7	3,196	0.7	3,335	0.8	3,525	0.8	5.7
Men	1,198	0.6	1,263	0.7	1,325	0.7	1,436	0.8	8.4
Women	1,755	0.7	1,933	0.8	2,010	0.8	2,089	0.8	3.9
Nonresident Alien	6,407	1.5	4,688	1.1	6,362	1.5	6,177	1.4	-2.9
Men	3,696	1.9	2,560	1.3	3,188	1.7	2,972	1.6	1.0
Women	2,711	1.1	2,128	0.9	3,174	1.3	3,205	1.2	1.0

Source: U.S. Department of Education, National Center for Education Statistics, *Race/Ethnicity Trends in Degrees Conferred by Institutions of Higher Education: 1980-81 through 1989-89*. Washington, D.C.: Office of Educational Research and Improvement, May 1992.

Note: Tabulations for years prior to 1985 did not disaggregate associate degrees from less than two-year awards. Therefore, the data for earlier years are not shown. 1985 figures in this table exclude degree recipients whose racial/ethnic status and major field of study could not be imputed; therefore, totals may be smaller than those reported elsewhere. Detail may not sum to totals because of rounding. The percentage figures for men in each subgroup (Minority, Hispanic, African American, etc.) show the associate's degrees awarded to men in that subgroup as a percentage of all associate's degrees awarded to men. The percentage figures for women in each subgroup show the associate's degrees awarded to women in that subgroup as a percentage of all associate's degrees awarded to women. The percentage figures on the total line for each subgroup show the associate's degrees awarded to all members of that subgroup as a percentage of all associate's degrees.

[a] Figures in the percent columns of this line show the number of degrees awarded to men as a percentage of all degrees awarded in the year specified.

[b] Figures in the percent columns of this line show the number of degrees awarded to women as a percentage of all degrees awarded in the year specified.

[c] Asian American includes Pacific Islanders.

[d] American Indian includes Alaskan Natives.

[e] Data for academic year 1989 have been revised from previously published figures.

Table 10
Bachelor's Degrees by Race/Ethnicity and Sex for Selected Years

	Total	Percent	Total	Percent	Total	Percent	Total	Percent	Total	Percent	Percent Change 1989-90
Total	934,800	100.0	968,311	100.0	991,260	100.0	1,016,350	100.0	1,046,930	100.0	3.0
Men	469,625	50.2[a]	476,148	49.2	480,780	48.5	481,946	47.4	490,101	46.8	1.7
Women	465,175	49.8[b]	492,163	50.8	510,480	51.5	534,404	52.6	556,829	53.2	4.2
White (non-Hispanic)	807,319	86.4	826,106	85.3	841,821	84.9	859,699	84.6	882,996	84.3	2.7
Men	406,173	86.5	405,085	85.1	406,751	84.6	407,142	84.5	413,469	84.4	1.6
Women	401,146	86.2	421,021	85.5	435,069	85.2	452,557	84.7	469,527	84.3	3.7
Minority	104,892	11.2[c]	112,988	11.7	120,139	12.1	129,615	12.8	137,157	13.1	5.8
Men	47,128	10.0[d]	50,972	10.7	54,433	11.3	57,312	11.9	59,592	12.2	4.0
Women	57,764	12.4[e]	62,106	12.6	65,706	12.9	72,303	13.5	77,565	13.9	7.3
Hispanic	21,832	2.3	25,874	2.7	26,990	2.7	29,910	2.9	32,686	3.1	9.3
Men	10,810	2.3	12,402	2.6	12,864	2.7	13,947	2.9	14,871	3.0	6.6
Women	11,022	2.4	13,472	2.7	14,126	2.8	15,963	3.0	17,815	3.2	11.6
African American (non-Hispanic)	60,673	6.5	57,473	5.9	56,555	5.7	58,065	5.7	61,074	5.8	5.2
Men	24,511	5.2	23,018	4.8	22,499	4.7	22,363	4.6	23,276	4.7	4.1
Women	36,162	7.8	34,455	7.0	34,056	6.7	35,702	6.7	37,798	6.8	5.9
Asian American[f]	18,794	2.0	25,395	2.6	32,618	3.3	37,686	3.7	39,059	3.7	3.6
Men	10,107	2.2	13,554	2.8	17,249	3.6	19,271	4.0	19,617	4.0	1.8
Women	8,687	1.9	11,841	2.4	15,369	3.0	18,415	3.4	19,442	3.5	5.6
American Indian[g]	3,593	0.4	4,246	0.4	3,971	0.4	3,954	0.4	4,338	0.4	9.7
Men	11,700	0.4	1,998	0.4	1,819	0.4	1,731	0.4	1,828	0.4	5.6
Women	1,893	0.4	2,248	0.5	2,152	0.4	2,223	0.4	2,510	0.5	12.9
Nonresident Alien	22,589	2.4	29,217	3.0	29,306	3.0	27,036	2.7	26,777	2.6	-1.0
Men	16,324	3.5	20,091	4.2	19,598	4.1	17,492	3.6	17,040	1.7	-2.6
Women	6,265	1.3	9,126	1.9	9,708	1.9	9,544	1.8	9,737	1.7	2.0

Source: U.S. Department of Education, National Center for Education Statistics, *Race/Ethnicity Trends in Degrees Conferred by Institutions of Higher Education: 1980-81 through 1989-90*. Washington, D.C.: Office of Educational Research and Improvement, May 1992.

Note: As of academic year 1989, degrees conferred by race/ethnicity were released annually instead of biannually. Data for academic year 1989 have been revised from previously published figures. Data represent programs, not organizational units within institutions.

[a] Degrees awarded to men as a percentage of all bachelor's degrees awarded that year.

[b] Degrees awarded to women as a percentage of all bachelor's degrees awarded that year.

[c] Degrees awarded to this group as a percentage of all bachelor's degrees awarded that year.

[d] Degrees awarded to men in this group as a percentage of all bachelor's degrees awarded to men that year.

[e] Degrees awarded to women in this group as a percentage of all bachelor's degrees awarded to women that year.

[f] Asian American includes Pacific Islanders.

[g] American Indian includes Alaskan Natives.

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Table 11
Master's Degrees by Race/Ethnicity and Sex for Selected Years

	1985-86 Total	1985-86 Percent	1987-88 Total	1987-88 Percent	1988-89 Total	1988-89 Percent	1989-90 Total	1989-90 Percent	1990-91 Total	1990-91 Percent	Percent Change 1989-90
Total	294,183	100.0	280,421	100.0	289,341	100.0	309,770	100.0	321,992	100.0	3.9
Men	145,666[a]	49.5	139,417	49.7	141,264	48.8	148,872	48.1	152,907	47.5	2.7
Women	148,517[b]	50.5	141,004	50.3	148,077	51.2	160,898	51.9	169,085	52.5	5.1
White (non-Hispanic)	241,216	82.0	223,628	79.7	228,870	79.1	241,607	78.0	251,518	78.1	4.1
Men	115,562	79.3	106,059	76.1	105,573	74.7	109,709	73.7	112,976	73.9	3.0
Women	125,654	84.6	117,569	83.4	123,297	83.3	133,047	82.7	138,542	81.9	4.1
Minority	30,910[c]	10.5	29,841	10.6	30,573	10.6	32,800	10.6	34,990	10.9	6.7
Men	13,517[d]	9.3	13,684	9.8	14,236	10.1	15,029	10.1	15,593	10.2	3.8
Women	17,393[e]	11.7	16,157	11.5	16,337	11.0	17,771	11.0	19,397	11.5	9.1
Hispanic	6,461	2.2	6,864	2.4	7,044	2.4	7,282	2.4	7,905	2.5	8.6
Men	3,085	2.1	3,059	2.2	3,330	2.4	3,328	2.2	3,566	2.3	7.2
Women	3,376	2.3	3,805	2.7	3,714	2.5	3,954	2.5	4,339	2.6	9.7
African American (non-Hispanic)	17,133	5.8	13,939	5.0	13,867	4.8	14,096	4.6	15,331	4.8	8.8
Men	6,158	4.2	5,200	3.7	5,151	3.6	5,175	3.5	5,492	3.6	6.1
Women	10,975	7.4	8,739	6.2	8,716	5.9	8,921	5.5	9,839	5.8	10.3
Asian American[f]	6,282	2.1	7,782	2.8	8,558	3.0	10,336	3.3	10,646	3.3	3.0
Men	3,773	2.6	4,842	3.5	5,238	3.7	6,050	4.1	6,070	4.0	0.3
Women	2,509	1.7	2,940	2.1	3,320	2.2	4,286	2.7	4,576	2.7	6.8
American Indian[g]	1,034	0.4	1,256	0.4	1,104	0.4	1,086	0.4	1,108	0.3	2.0
Men	501	0.3	583	0.4	517	0.4	476	0.3	465	0.3	-2.3
Women	533	0.4	673	0.5	587	0.4	610	0.4	643	0.4	5.4
Nonresident Alien	22,057	7.5	26,952	9.6	29,898	10.3	34,214	11.0	35,484	11.0	3.7
Men	16,587	11.4	19,674	14.1	21,456	15.2	24,134	16.2	24,484	15.9	3.7
Women	5,470	3.7	7,278	5.2	8,443	5.7	10,080	6.3	11,146	6.6	10.6

Source: U.S. Department of Education, National Center for Education Statistics, *Race/Ethnicity Trends in Degrees Conferred by Institutions of Higher Education: 1980-81 through 1990-91*. Washington, D.C.: Office of Educational Research and Improvement, May 1992.

Note: As of academic year 1989, degrees conferred by race/ethnicity were released annually instead of biannually. Data for academic year 1989 have been revised from previously published figures. Data represent programs, not organizational units within institutions.

[a] Degrees awarded to men as a percentage of all master's degrees awarded that year.

[b] Degrees awarded to women as a percentage of all master's degrees awarded that year.

[c] Degrees awarded to this group as a percentage of all master's degrees awarded that year.

[d] Degrees awarded to men in this group as a percentage of all master's degrees awarded to men that year.

[e] Degrees awarded to women in this group as a percentage of all master's degrees awarded to women that year.

[f] Asian American includes Pacific Islanders.

[g] American Indian includes Alaskan Natives.

Table 12
First Professional Degrees by Race/Ethnicity and Sex for Selected Years

	1985-86		1986-87		1987-88		1988-89		1989-90		Percent Change
	Total	Percent	Total	Percent	Total	Percent	Total	Percent	Total	Percent	1989-90
Total	71,340	100.0	71,057	100.0	71,617	100.0	70,736	100.0	70,736	100.0	-0.2
Men	52,194	73.2[a]	47,501	66.8	46,522	65.0	45,046	63.6	43,819	61.9	-2.7
Women	19,146	26.8[b]	23,556	33.2	25,095	35.0	25,810	36.4	26,917	38.1	4.3
White (non-Hispanic)	64,551	90.5	63,219	89.0	62,688	87.5	61,214	86.4	60,291	85.2	-1.5
Men	47,629	91.3	42,630	89.7	41,149	88.5	39,399	87.5	37,909	86.5	-3.8
Women	16,922	88.4	20,589	87.4	21,539	85.8	21,815	84.5	22,382	83.2	2.6
Minority	6,120	8.6[c]	6,977	9.8	8,045	11.2	8,590	12.1	9,409	13.3	9.5
Men	4,028	7.7[d]	4,190	8.8	4,741	10.2	4,935	11.0	5,208	11.9	5.5
Women	2,092	10.9[e]	2,787	11.8	3,304	13.2	3,655	14.2	4,201	15.6	14.9
Hispanic	1,541	2.2	1,884	2.7	2,051	2.9	2,269	3.2	2,427	3.4	7.0
Men	1,131	2.2	1,239	2.6	1,303	2.8	1,374	3.1	1,454	3.3	5.8
Women	410	2.1	645	2.7	748	3.0	895	3.5	973	3.6	8.7
African American (non-Hispanic)	2,931	4.1	3,029	4.3	3,420	4.8	3,148	4.4	3,389	4.8	7.7
Men	1,772	3.4	1,623	3.4	1,835	3.9	1,618	3.6	1,650	3.8	2.0
Women	1,159	6.1	1,406	6.0	1,585	6.3	1,530	5.9	1,739	6.5	13.7
Asian American[f]	1,456	2.0	1,816	2.6	2,270	3.2	2,976	4.2	3,336	4.7	12.1
Men	991	1.9	1,152	2.4	1,420	3.1	1,819	4.0	1,966	4.5	8.1
Women	465	2.4	664	2.8	850	3.4	1,157	4.5	1,370	5.1	18.4
American Indian[g]	192	0.3	248	0.3	304	0.4	264	0.4	257	0.4	-2.7
Men	134	0.3	176	0.4	183	0.4	148	0.3	138	0.3	-6.8
Women	58	0.3	72	0.3	121	0.5	116	0.5	119	0.4	2.6
Nonresident Alien	669	0.9	861	1.2	884	1.2	985	1.4	1,036	1.5	5.2
Men	537	1.0	681	1.4	632	1.4	688	1.5	702	1.6	2.0
Women	132	0.7	180	0.8	252	1.0	297	1.2	334	1.2	12.5

Source: U.S. Department of Education, National Center for Education Statistics, *Race/Ethnicity Trends in Degress Conferred by Institutions of Higher Education: 1980-81 through 1989-90*. Washington, D.C.: Office of Educational Research and Improvement, May 1992.

Note: As of academic year 1989, degrees conferred by race/ethnicity were released annually instead of biannually. Data for academic year 1989 have been revised from previously published figures. Data represent programs, not organizational units within institutions.

[a] Degrees awarded to men as a percentage of all first professional degrees awarded that year.

[b] Degrees awarded to women as a percentage of all first professional degrees awarded that year.

[c] Degrees awarded to this group as a percentage of all first professional degrees awarded that year.

[d] Degrees awarded to men in this group as a percentage of all first professional degrees awarded to men that year.

[e] Degrees awarded to women in this group as a percentage of all first professional degrees awarded to women that year.

[f] Asian American includes Pacific Islanders.

[g] American Indian includes Alaskan Natives.

Table 13
Bachelor's Degrees for Selected Fields by Race/Ethnicity and Sex, 1981, 1989, and 1990

	TOTAL					MINORITIES				
	1981 Total	1989 Total	1990 Total	Percent Change 1981-90	Percent Change 1989-90	1981 Total	1989 Total	1990 Total	Percent Change 1981-90	Percent Change 1989-90
EDUCATION										
Total	108,265	97,082	104,715	-3.3	7.9	13,633	8,165	8,771	-35.7	7.4
Men	27,069	21,681	22,980	-15.1	6.0	3,763	2,162	2,253	-40.1	4.2
Women	81,196	75,401	81,735	0.7	8.4	9,870	6,003	6,518	-34.0	8.6
BUSINESS										
Total	200,857	247,175	249,081	24.0	0.8	22,093	30,892	32,061	45.1	3.8
Men	127,058	131,630	132,704	4.4	0.8	11,572	13,538	13,929	20.4	2.9
Women	73,799	115,545	116,377	57.7	0.7	10,521	17,354	18,132	64.9	4.5
SOCIAL SCIENCIES										
Total	100,647	107,914	116,925	16.2	8.4	13,136	14,565	16,057	22.2	10.2
Men	56,156	60,011	65,248	16.2	8.7	6,346	6,921	7,640	20.4	10.4
Women	44,491	47,903	51,677	16.2	7.9	6,790	7,644	8,417	12.6	10.1
HEALTH PROFESSIONS										
Total	63,649	59,138	58,816	-7.6	-0.5	6,277	7,327	7,947	26.6	8.5
Men	10,519	8,947	9,235	-12.2	3.2	1,036	1,182	1,274	23.0	7.8
Women	53,130	50,191	49,581	-6.7	-1.2	5,241	6,145	6,673	17.2	8.6
BIOLOGICAL/LIFE SCIENCES										
Total	43,216	36,059	37,170	-14.0	3.1	5,039	6,300	6,780	34.6	7.6
Men	24,149	17,953	18,325	-24.1	2.1	2,499	2,908	3,029	21.2	4.2
Women	19,067	18,106	18,845	-1.2	4.1	2,540	3,392	3,751	33.5	10.6
ENGINEERING[a]										
Total	74,954	85,225	82,110	9.5	-3.7	7,143	12,849	13,001	82.0	1.2
Men	67,255	73,615	70,807	5.3	-3.8	6,194	10,308	10,433	68.4	1.2
Women	7,699	11,610	11,303	46.8	-2.6	949	2,541	2,568	167.8	1.1

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Source: U.S. Department of Education, National Center for Education Statistics, *Race/Ethnicity Trends in Degrees Conferred by Institutions of Higher Education: 1980-81 through 1989-90*. Washington, D.C.: Office of Educational Research and Improvement, May 1992.

Note: Some institutions did not report the racial/ethnic data for earned degrees. Data of some of these nonreporting institutions were imputed. Data for academic year 1989 have been revised from previously published numbers. Data represent programs, not organizational units within institutions. Because of rounding, details may not add to totals.

Table 13 - *Continued*

Bachelor's Degrees for Selected Fields by Race/Ethnicity and Sex, 1981, 1989, and 1990

	HISPANIC					AFRICAN AMERICAN				
	1981 Total	1989 Total	1990 Total	Percent Change 1981-90	Percent Change 1989-90	1981 Total	1989 Total	1990 Total	Percent Change 1981-90	Percent Change 1989-90
EDUCATION										
Total	2,847	2,281	2,853	0.2	25.1	9,494	4,245	4,389	-53.8	3.4
Men	754	579	643	-14.7	11.1	2,587	1,151	1,189	-54.0	3.3
Women	2,093	1,702	2,210	5.6	29.8	6,907	3,094	3,200	-53.7	3.4
BUSINESS										
Total	4,114	7,017	7,182	74.6	2.4	13,400	15,105	15,726	17.4	4.1
Men	2,560	3,495	3,581	39.9	2.5	6,503	6,060	6,313	-2.9	4.2
Women	1,554	3,522	3,601	131.7	2.2	6,897	9,045	9,413	36.5	4.1
SOCIAL SCIENCIES										
Total	2,888	3,658	4,081	41.3	11.6	8,129	6,523	7,148	-12.1	9.6
Men	1,549	1,890	2,122	37.0	12.3	3,696	2,871	3,120	-15.6	8.7
Women	1,339	1,768	1,959	46.3	10.8	4,433	3,652	4,028	-9.1	10.3
HEALTH PROFESSIONS										
Total	1,153	1,397	1,610	39.6	15.2	3,603	3,981	4,192	16.3	5.3
Men	262	270	318	21.4	17.8	436	467	515	18.1	10.3
Women	891	1,127	1,292	45.0	14.6	3,167	3,514	3,677	16.1	4.6
BIOLOGICAL/LIFE SCIENCES										
Total	1,144	1,258	1,288	12.6	2.4	2,269	1,942	2,037	-10.2	4.9
Men	648	653	670	3.4	2.6	954	710	672	-29.6	-5.4
Women	496	605	618	24.6	2.1	1,315	1,232	1,365	3.8	10.8
ENGINEERING[a]										
Total	1,433	2,447	2,590	80.7	5.8	2,449	3,219	3,272	33.6	1.6
Men	1,302	2,056	2,205	69.4	7.2	2,020	2,342	2,393	18.5	2.2
Women	131	391	385	193.9	-1.5	429	877	879	104.9	0.2

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Table 13 - *Continued*

Bachelor's Degrees for Selected Fields by Race/Ethnicity and Sex, 1981, 1989, and 1990

	WHITE					ASIAN AMERICAN				
	1981 Total	1989 Total	1990 Total	Percent Change 1981-90	Percent Change 1989-90	1981 Total	1989 Total	1990 Total	Percent Change 1981-90	Percent Change 1989-90
EDUCATION										
Total	93,724	88,276	95,267	1.6	7.9	723	1,106	931	28.8	-15.8
Men	22,876	19,233	20,438	-10.7	6.3	258	262	264	2.3	0.8
Women	70,848	69,043	74,829	5.6	8.4	465	844	667	43.4	-21.0
BUSINESS										
Total	174,198	208,325	209,399	20.2	0.5	3,943	7,973	8,326	111.2	4.4
Men	112,267	113,141	114,068	1.6	0.8	2,121	3,633	3,643	71.8	0.3
Women	61,931	95,184	95,331	53.9	0.2	1,822	4,340	4,683	157.0	7.9
SOCIAL SCIENCIES										
Total	85,535	91,113	98,418	15.1	8.0	1,645	3,970	4,315	162.3	8.7
Men	48,509	51,761	56,153	15.8	8.5	860	1,947	2,143	149.2	10.1
Women	37,026	39,352	42,265	14.1	7.4	785	2,023	2,172	176.7	7.4
HEALTH PROFESSIONS										
Total	56,790	51,053	50,065	-11.8	-1.9	1,312	1,710	1,882	43.4	10.1
Men	9,276	7,534	7,717	-16.8	2.4	299	400	403	34.8	0.8
Women	47,514	43,519	42,348	-10.9	-2.7	1,013	1,310	1,479	46.0	12.9
BIOLOGICAL/LIFE SCIENCES										
Total	37,276	28,874	29,519	-20.8	2.2	1,489	2,954	3,322	123.1	12.5
Men	21,085	14,613	14,863	-29.5	1.7	830	1,475	1,613	94.3	9.4
Women	16,191	14,261	14,656	-9.5	2.8	659	1,479	1,709	159.3	15.6
ENGINEERING[a]										
Total	60,848	66,561	63,464	4.3	-4.7	3,066	6,903	6,922	125.8	0.3
Men	54,453	58,001	55,256	1.5	-4.7	2,699	5,676	5,647	109.2	-0.5
Women	6,395	8,560	8,208	28.4	-4.1	367	1,227	1,275	247.4	3.9

Continued on next page

Table 13 - *Continued*

Bachelor's Degrees for Selected Fields
by Race/Ethnicity and Sex, 1981, 1989, and 1990

	AMERICAN INDIAN[c]					NONRESIDENT ALIEN				
	1981 Total	1989 Total	1990 Total	Percent Change 1981-90	Percent Change 1989-90	1981 Total	1989 Total	1990 Total	Percent Change 1981-90	Percent Change 1989-90
EDUCATION										
Total	569	533	598	5.1	12.2	908	641	677	-25.4	5.6
Men	164	170	157	-4.3	-7.6	430	286	289	-32.8	1.0
Women	405	363	441	8.9	21.5	478	355	388	-18.8	9.3
BUSINESS										
Total	636	797	827	30.0	3.8	4,566	7,958	7,621	66.9	-4.2
Men	388	350	392	1.0	12.0	3,219	4,951	4,707	46.2	-4.9
Women	248	447	435	75.4	-2.7	1,347	3,007	2,914	116.3	-3.1
SOCIAL SCIENCIES										
Total	474	414	513	8.2	23.9	1,976	2,236	2,450	24.0	9.6
Men	241	213	255	5.8	19.7	1,301	1,329	1,455	11.8	9.5
Women	233	201	258	10.7	28.4	675	907	995	47.4	9.7
HEALTH PROFESSIONS										
Total	209	239	263	25.8	10.0	582	758	804	38.1	6.1
Men	39	45	38	-2.6	-15.6	207	231	244	17.9	5.6
Women	170	194	225	32.4	16.0	375	527	560	49.3	6.3
BIOLOGICAL/LIFE SCIENCES										
Total	137	146	133	-2.9	-8.9	901	885	871	-3.3	-1.6
Men	67	70	74	10.4	5.7	565	432	433	-23.4	0.2
Women	70	76	59	-15.7	-22.4	336	453	438	30.4	-3.3
ENGINEERING[a]										
Total	195	280	217	11.3	-22.5	6,963	5,815	5,645	-18.9	-2.9
Men	173	234	188	8.7	-19.7	6,608	5,306	5,118	-22.5	-3.5
Women	22	46	29	31.8	-37.0	355	509	527	48.5	3.5

[a] Engineering includes Engineering Technologies.

[b] Asian American includes Pacific Islanders.

[c] American Indian includes Alaskan Natives.

Table 14
Master's Degrees for Selected Fields by Race/Ethnicity and Sex, 1981, 1989, and 1990

	TOTAL					MINORITIES				
	1981 Total	1989 Total	1990 Total	Percent Change 1981-90	Percent Change 1989-90	1981 Total	1989 Total	1990 Total	Percent Change 1981-90	Percent Change 1989-90
EDUCATION										
Total	98,380	82,533	86,057	-12.5	4.3	12,902	8,846	9,548	-26.0	7.9
Men	28,079	20,287	20,834	-25.8	2.7	3,380	2,078	2,230	-34.0	7.3
Women	70,301	62,246	65,223	-7.2	4.8	9,522	6,768	7,318	-23.1	8.1
BUSINESS										
Total	57,541	73,521	77,203	34.2	5.0	5,016	7,748	8,172	62.9	5.5
Men	43,045	48,869	50,983	18.4	4.3	3,519	4,691	4,878	38.6	4.0
Women	14,496	24,652	26,220	80.9	6.4	1,497	3,057	3,294	120.0	7.8
SOCIAL SCIENCES										
Total	11,917	10,867	11,419	-4.2	5.1	1,172	1,010	1,163	-0.8	15.1
Men	7,442	6,510	6,758	-9.2	3.8	667	557	614	-7.9	10.2
Women	4,475	4,357	4,661	4.2	7.0	505	453	549	8.7	21.2
HEALTH PROFESSIONS										
Total	16,515	19,293	20,354	23.2	5.5	1,642	1,887	2,101	28.0	11.3
Men	4,316	4,235	4,534	5.1	7.1	464	468	507	9.3	8.3
Women	12,199	15,058	15,820	29.7	5.1	1,178	1,419	1,594	35.3	12.3
PUBLIC AFFAIRS										
Total	20,074	19,417	19,574	-2.5	0.8	2,920	2,907	3,135	7.4	7.8
Men	8,957	7,298	7,156	-20.1	-1.9	1,219	1,062	1,137	-6.7	7.1
Women	11,117	12,119	12,418	11.7	2.5	1,701	1,845	1,998	17.5	8.3
ENGINEERING [a]										
Total	16,358	24,572	24,848	51.9	1.1	1,648	3,014	2,950	79.0	-2.1
Men	14,998	21,378	21,429	42.9	0.2	1,473	2,519	2,424	64.6	-3.8
Women	1,360	3,194	3,419	151.4	7.0	175	495	526	200.6	6.3

Source: U.S. Department of Education, National Center for Education Statistics, *Race/Ethnicity Trends in Degrees Conferred by Institutions of Higher Education: 1980-81 through 1989-90* Washington, D.C.: Office of Educational Research and Improvement, May 1992.

Note: Some institutions did not report the racial/ethnic data for earned degrees. Data of some of these nonreporting institutions were imputed. Data for academic year 1989 have been revised from previously published numbers. Data represent programs, not organizational units within institutions. Because of rounding, details may not add to totals.

Table 14 — *Continued*
Master's Degrees for Selected Fields by Race/Ethnicity and Sex, 1981, 1989, and 1990

	HISPANIC					AFRICAN AMERICAN				
	1981 Total	1989 Total	1990 Total	Percent Change 1981-90	Percent Change 1989-90	1981 Total	1989 Total	1990 Total	Percent Change 1981-90	Percent Change 1989-90
EDUCATION										
Total	2,831	2,194	2,535	-10.5	15.5	8,645	5,310	5,585	-35.4	5.2
Men	869	590	699	-19.6	18.5	2,061	1,114	1,171	-43.2	5.1
Women	1,962	1,604	1,836	-6.4	14.5	6,584	4,196	4,414	-33.0	5.2
BUSINESS										
Total	869	1,581	1,631	87.7	3.2	2,359	3,062	3,344	41.8	9.2
Men	676	983	1,039	53.7	5.7	1,554	1,742	1,805	16.2	3.6
Women	193	598	592	206.7	-1.0	805	1,320	1,539	91.2	16.6
SOCIAL SCIENCES										
Total	280	244	284	1.4	16.4	615	395	447	-27.3	13.2
Men	181	145	154	-14.9	6.2	311	197	220	-29.3	11.7
Women	99	99	130	31.3	31.3	304	198	227	-25.3	14.6
HEALTH PROFESSIONS										
Total	251	402	453	80.5	12.7	889	855	932	4.8	9.0
Men	86	103	123	43.0	19.4	197	179	169	-14.2	5.6
Women	165	299	330	100.0	10.4	692	676	763	10.3	12.9
PUBLIC AFFAIRS										
Total	629	622	674	7.2	8.4	1,893	1,781	1,992	5.2	11.8
Men	310	253	258	-16.8	2.0	713	601	691	-3.1	15.0
Women	319	369	416	30.4	12.7	1,180	1,180	1,301	10.3	10.3
ENGINEERING[a]										
Total	278	463	449	61.5	-3.0	260	415	447	71.9	7.7
Men	251	385	377	50.2	-2.1	222	306	332	49.5	8.5
Women	27	78	72	166.7	-7.7	38	109	115	202.6	5.5

Continued on next page

Table 14 — *Continued*
Master's Degrees for Selected Fields by Race/Ethnicity and Sex, 1981, 1989, and 1990

	WHITE					ASIAN AMERICAN[b]				
	1981 Total	1989 Total	1990 Total	Percent Change 1981-90	Percent Change 1989-90	1981 Total	1989 Total	1990 Total	Percent Change 1981-90	Percent Change 1989-90
EDUCATION										
Total	82,779	71,119	73,544	-11.2	3.4	973	961	1,023	5.1	6.5
Men	23,291	17,046	17,315	-25.7	1.6	291	259	254	-12.7	-1.9
Women	59,488	54,071	56,229	-5.5	4.0	682	702	769	12.8	9.5
BUSINESS										
Total	47,474	57,785	60,995	28.5	5.6	1,633	2,924	3,004	84.0	2.7
Men	35,380	38,288	40,334	14.0	5.3	1,161	1,850	1,902	63.8	2.8
Women	12,094	19,497	20,661	70.8	6.0	472	1,074	1,102	133.5	2.6
SOCIAL SCIENCES										
Total	9,150	7,703	7,999	-12.6	3.8	233	319	372	59.7	16.6
Men	5,571	4,480	4,618	-17.1	3.1	147	184	214	45.6	16.3
Women	3,579	3,223	3,381	-5.5	4.9	86	135	158	83.7	17.0
HEALTH PROFESSIONS										
Total	14,175	16,277	17,147	21.0	5.3	448	551	633	41.3	14.9
Men	3,443	3,224	3,542	2.9	9.9	164	165	194	18.3	17.6
Women	10,732	13,053	13,605	26.8	4.2	284	386	439	54.6	13.7
PUBLIC AFFAIRS										
Total	16,435	15,560	15,600	-5.1	0.3	306	408	377	23.2	-7.6
Men	7,212	5,572	5,455	-24.4	-2.1	149	175	145	-2.7	-17.1
Women	9,223	9,988	10,145	10.0	1.6	157	233	232	47.8	-0.4
ENGINEERING[a]										
Total	10,147	14,245	14,337	41.3	0.6	1,079	2,098	2,012	86.5	-4.1
Men	9,177	12,119	12,170	32.6	0.4	974	1,795	1,682	72.7	-6.3
Women	970	2,126	2,167	123.4	1.9	105	303	330	214.3	8.9

Continued on next page

Table 14 — *Continued*
Master's Degrees for Selected Fields by Race/Ethnicity and Sex, 1981, 1989, and 1990

	AMERICAN INDIAN [c]					NONRESIDENT ALIEN				
	1981 Total	1989 Total	1990 Total	Percent Change 1981-90	Percent Change 1989-90	1981 Total	1989 Total	1990 Total	Percent Change 1981-90	Percent Change 1989-90
EDUCATION										
Total	453	381	405	-10.6	6.3	2,699	2,568	2,965	9.9	15.5
Men	159	115	106	-33.3	-7.8	1,408	1,161	1,289	-8.5	11.0
Women	294	266	299	1.7	12.4	1,291	1,407	1,676	29.8	19.1
BUSINESS										
Total	155	181	193	24.5	6.6	5,051	7,988	8,036	59.1	0.6
Men	128	116	132	3.1	13.8	4,146	5,890	5,771	39.2	-2.0
Women	27	65	61	125.9	-6.2	905	2,098	2,265	150.3	8.0
SOCIAL SCIENCES										
Total	44	52	60	36.4	15.4	1,595	2,154	2,257	41.5	4.8
Men	28	31	26	-7.1	-16.1	1,204	1,473	1,526	26.7	3.6
Women	16	21	34	112.5	61.9	391	681	731	87.0	7.3
HEALTH PROFESSIONS										
Total	54	79	83	53.7	5.1	698	1,129	1,106	58.5	-2.0
Men	17	21	21	23.5	0.0	409	543	485	18.6	-10.7
Women	37	58	62	67.6	6.9	289	586	621	114.9	6.0
PUBLIC AFFAIRS										
Total	92	96	92	0.0	-4.2	719	950	839	16.7	-11.7
Men	47	33	43	-8.5	30.3	526	664	564	7.2	-15.1
Women	45	63	49	8.9	-22.2	193	286	275	42.5	-3.8
ENGINEERING [a]										
Total	31	38	42	35.5	10.5	4,563	7,313	7,561	65.7	3.4
Men	26	33	33	26.9	0.0	4,348	6,740	6,835	57.2	1.4
Women	5	5	9	N/A	80.0	215	573	726	237.7	26.7

[a] Engineering includes Engineering Technologies.

[b] Asian American includes Pacific Islanders.

[c] American Indian includes Alaskan Natives.

Table 15
Doctoral Degrees by U.S. Citizenship by Race/Ethnicity and Sex, 1980 to 1991

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	Percent Change 1981-91	Percent Change 1990-91
TOTAL DOCTORATES [a]	31,357	31,106	31,280	31,332	31,291	31,896	32,367	33,489	34,318	36,057	37,451	19.4	3.9
Men	21,465	21,013	20,747	20,633	20,547	20,590	20,941	21,677	21,811	22,955	23,686	10.3	3.2
Women	9,892	10,093	10,533	10,699	10,744	11,306	11,426	11,812	12,507	13,102	13,765	39.2	5.1
U.S. CITIZENS [b]													
All U.S. Citizens	25,061	24,388	24,358	24,026	23,363	23,081	22,991	23,288	23,400	24,886	24,721	-1.4	-0.7
Men	16,360	15,559	15,119	14,729	14,217	13,633	13,581	13,725	13,397	14,151	13,885	-15.1	-1.9
Women	8,701	8,829	9,239	9,297	9,146	9,448	9,410	9,563	10,003	10,735	10,836	24.5	0.9
White	21,980	21,677	21,699	21,349	20,757	20,626	20,470	20,782	20,893	22,156	21,859	-0.6	-1.3
Men	14,459	13,987	13,609	13,170	12,805	12,303	12,172	12,343	11,989	12,679	12,364	-14.5	-2.5
Women	7,521	7,690	8,090	8,179	7,952	8,323	8,298	8,439	8,904	9,477	9,495	26.2	0.2
African American	1,013	1,047	922	953	912	823	767	814	821	897	933	-7.9	4.0
Men	499	483	413	427	379	322	317	315	327	350	385	-22.8	10.0
Women	514	564	509	526	533	501	450	499	494	547	548	6.6	0.2
Hispanic	464	535	539	536	561	572	619	597	582	718	708	52.6	-1.4
Men	275	344	288	314	300	303	333	323	309	378	358	30.2	-5.3
Women	189	191	251	222	261	269	286	274	273	340	350	85.2	2.9
Asian American	465	452	492	512	516	531	542	614	626	640	762	63.9	19.1
Men	315	281	312	338	329	348	369	414	441	426	469	48.9	10.1
Women	150	171	180	174	187	183	173	200	185	214	293	95.3	36.9
American Indian [c]	85	77	81	74	95	99	115	94	94	96	128	50.6	33.3
Men	56	44	50	54	39	58	62	52	49	52	73	30.4	40.4
Women	29	33	31	20	56	41	53	42	45	44	55	89.7	25.0
NON-U.S. CITIZENS, TOTAL	5,221	5,432	5,774	6,054	6,553	6,707	7,187	7,817	8,273	9,769	10,666	104.3	9.2
Men	4,360	4,536	4,825	5,024	5,394	5,481	5,839	6,298	6,582	7,804	8,346	91.4	6.9
Women	861	896	949	1,030	1,159	1,226	1,348	1,519	1,691	1,965	2,320	169.5	18.1

Source: National Research Council, Doctorate Records File, various years.

[a] Includes doctorates with unknown citizenship status and unknown race/ethnicity.

[b] Includes doctorates with unknown race/ethnicity.

[c] American Indian includes Alaskan Natives.

Table 16
Doctoral Degrees by Field, U.S. Citizenship, and Race/Ethnicity, 1980, 1989, 1990, and 1991

	TOTAL					PHYSICAL SCIENCES					ENGINEERING				
	1980	1989	1990	1991	Percent Change 1990-91	1980	1989	1990	1991	Percent Change 1990-91	1980	1989	1990	1991	Percent Change 1990-91
Total Doctorates [a]	31,020	34,319	36,027	37,451	4.0	4,111	5,457	5,872	6,276	6.9	2,479	4,530	4,900	5,212	6.4
American Indian	75	94	96	128	33.3	5	18	5	14	180.0	3	7	4	6	50.0
Asian	2,621	5,150	6,080	7,271	19.6	605	1,262	1,563	1,846	18.1	740	1,612	1,800	2,182	21.2
Black	1,445	1,229	1,255	1,355	8.0	50	68	53	90	69.8	57	57	74	77	4.1
Hispanic	821	1,041	1,192	1,280	7.4	91	150	166	192	15.7	77	116	124	127	2.4
White	23,805	23,112	24,246	24,671	1.8	3,013	3,374	3,516	3,707	5.4	1,428	2,196	2,352	2,310	-1.8
U.S. Citizens [b]	25,222	23,400	24,886	24,721	-0.7	3,072	3,233	3,407	3,450	1.3	1,255	1,864	1,953	1,977	1.2
American Indian	75	94	96	128	33.3	5	18	5	14	180.0	3	7	4	6	50.0
Asian American	458	626	640	762	19.1	75	117	111	143	28.8	73	173	157	185	17.8
African American	1,032	821	897	933	4.0	25	35	27	40	48.1	11	24	28	43	53.6
Hispanic	412	582	718	708	-1.4	27	70	85	80	-5.9	18	34	39	47	20.5
White	21,994	20,893	22,156	21,859	-1.3	2,715	2,908	3,097	3,107	0.3	1,068	1,583	1,686	1,659	-1.6

	LIFE SCIENCES					SOCIAL SCIENCES					HUMANITIES				
	1980	1989	1990	1991	Percent Change 1990-91	1980	1989	1990	1991	Percent Change 1990-91	1980	1989	1990	1991	Percent Change 1990-91
Total Doctorates [a]	5,461	6,349	6,629	6,928	4.5	5,856	5,972	6,089	6,127	0.6	3,871	3,569	3,819	4,094	7.2
American Indian	7	12	9	19	111.1	13	18	23	21	-8.7	3	7	8	10	25.0
Asian	482	839	1,125	1,365	21.3	320	556	596	695	16.6	132	206	213	302	41.8
Black	161	177	166	192	15.7	249	247	269	280	4.1	127	95	87	122	40.2
Hispanic	173	222	241	263	9.1	150	196	234	259	10.7	118	131	177	188	6.2
White	4,258	4,484	4,558	4,665	2.3	4,691	4,091	4,364	4,357	-0.2	3,191	2,750	3,031	3,203	5.7
U.S. Citizens [b]	4,415	4,533	4,612	4,629	0.4	4,992	4,307	4,655	4,499	-3.4	3,395	2,726	3,091	3,151	1.9
American Indian	7	12	9	19	111.1	13	18	23	21	-8.7	3	7	8	10	25.0
Asian American	102	138	154	186	20.8	79	70	86	84	-2.3	40	40	35	44	25.7
African American	65	76	73	85	16.4	180	170	180	192	6.7	97	72	72	91	26.4
Hispanic	36	83	103	97	-5.8	93	130	169	176	4.1	79	84	111	110	-0.9
White	3,958	4,142	4,206	4,174	-0.8	4,402	3,860	4,122	3,975	-3.6	3,021	2,464	2,820	2,843	0.8

	EDUCATION					PROFESSIONAL-OTHER				
	1980	1989	1990	1991	Percent Change 1990-91	1980	1989	1990	1991	Percent Change 1990-91
Total Doctorates [a]	7,586	6,280	6,485	6,397	-1.4	1,656	2,196	2,270	2,417	6.5
American Indian	43	25	37	52	40.5	1	7	10	6	-40.0
Asian	242	330	353	412	16.7	100	340	426	469	10.1
Black	701	487	513	487	-5.1	100	98	94	107	13.8
Hispanic	183	188	201	207	3.0	29	38	49	44	-10.2
White	5,919	4,692	4,922	4,862	-1.2	1,305	1,479	1,503	1,567	4.3
U.S. Citizens [b]	6,749	5,243	5,629	5,424	-3.6	1,344	1,494	1,539	1,591	3.4
American Indian	43	25	37	52	40.5	1	7	10	6	-40.0
Asian American	65	57	66	81	22.7	24	31	31	39	25.8
African American	591	390	455	404	-11.2	63	54	62	78	25.8
Hispanic	144	156	180	170	-5.6	15	25	31	28	-9.7
White	5,652	4,574	4,837	4,680	-3.2	1,178	1,362	1,388	1,421	2.4

Source: National Research Council, Doctorate Records File, various years.

Note: [a] Total Doctorates number includes unknown citizenship and unknown race.
[b] Totals for other categories include unknown race.

Table 17
Total Higher Education Enrollment by State and Type of Institution, 1980 and 1990

	TOTAL POPULATION			TWO-YEAR INSTITUTIONS			FOUR-YEAR INSTITUTIONS			ALL INSTITUTIONS		
	1980	1990	Percent Change 1980-90	1980	1990	Percent Change 1980-90	1980	1990	Percent Change 1980-90	1980	1990	Percent Change 1980-90
STATES												
Alabama	3,893,888	4,040,587	3.8	43,393	105,470	143.1	120,913	142,686	18.0	164,306	248,156	51.0
Alaska	401,851	550,043	36.9	11,990	394	-96.7	9,306	29,439	216.3	21,296	29,833	40.1
Arizona	2,718,215	3,665,228	34.8	113,324	154,511	36.3	89,392	109,637	22.6	202,716	264,148	30.3
Arkansas	2,286,435	2,350,725	2.8	13,627	19,218	41.0	63,980	71,207	11.3	77,607	90,425	16.5
California	23,667,902	29,760,021	25.7	1,135,836	1,069,420	-5.8	654,340	741,118	13.3	1,790,176	1,810,538	1.1
Colorado	2,889,964	3,294,394	14.0	45,328	76,791	69.4	117,012	154,751	32.3	162,340	231,542	42.6
Connecticut	3,107,576	3,287,116	5.8	43,480	46,140	6.1	116,152	123,414	6.3	159,632	169,554	6.2
Delaware	594,338	666,168	12.1	7,850	10,828	37.9	25,089	31,176	24.3	32,939	42,004	27.5
DC	638,333	606,900	-4.9	0	0	N/A	86,675	80,156	-7.5	86,675	80,156	-7.5
Florida	9,746,324	12,937,926	32.7	210,967	318,724	51.1	200,284	270,199	34.9	411,251	588,923	43.2
Georgia	5,463,105	6,478,216	18.6	45,379	64,336	41.8	137,996	187,450	35.8	183,375	251,786	37.3
Hawaii	964,691	1,108,229	14.9	19,359	21,828	12.8	27,822	34,608	24.4	47,181	56,436	19.6
Idaho	943,935	1,006,749	6.7	11,905	13,834	16.2	31,113	38,047	22.3	43,018	51,881	20.6
Illinois	11,426,518	11,430,602	0	308,388	361,829	17.3	335,857	367,417	9.4	644,245	729,246	13.2
Indiana	5,490,224	5,544,159	1.0	33,565	41,281	23.0	212,871	243,551	14.4	246,436	284,832	15.6
Iowa	2,913,808	2,776,755	-4.7	37,106	52,206	40.7	103,343	118,309	14.5	140,449	170,515	21.4
Kansas	2,363,679	2,477,574	4.8	37,726	59,931	58.9	98,879	103,905	5.1	136,605	163,836	19.9
Kentucky	3,660,777	3,685,296	0.7	24,134	46,449	92.5	115,491	131,403	13.8	139,625	177,852	27.4
Louisiana	4,205,900	4,219,973	0.3	14,394	23,897	66.0	144,421	162,943	12.8	158,815	186,840	17.6
Maine	1,124,660	1,227,928	9.2	8,255	8,308	0.6	35,009	48,878	39.6	43,264	57,186	32.2
Maryland	4,216,975	4,781,468	13.4	93,721	110,696	18.1	131,805	154,166	17.0	225,526	264,862	17.4
Massachusetts	5,737,037	6,016,425	4.9	92,592	89,495	-3.3	325,823	328,339	0.8	418,415	417,834	-0.1
Michigan	9,262,078	9,295,297	0.4	218,874	230,325	5.2	301,257	339,478	12.7	520,131	569,803	9.5
Minnesota	4,075,970	4,375,099	7.3	40,873	69,943	71.1	165,818	183,846	10.9	206,691	253,789	22.8
Mississippi	2,520,638	2,573,216	2.1	39,108	53,462	36.7	63,196	69,421	9.9	102,304	122,883	20.1
Missouri	4,916,686	5,117,073	4.1	54,833	78,827	43.8	179,588	211,072	17.5	234,421	289,899	23.7
Montana	786,690	799,065	1.6	3,918	4,815	22.9	31,259	31,061	-0.6	35,177	35,876	2.0
Nebraska	1,569,825	1,578,385	0.5	21,728	34,254	57.6	67,760	78,577	16.0	89,488	112,831	26.1
Nevada	800,493	1,201,833	50.1	21,337	31,991	49.9	19,110	29,737	55.6	40,447	61,728	52.6
New Hampshire	920,610	1,109,252	20.5	6,947	11,166	60.7	39,847	48,345	21.3	46,794	59,511	27.2
New Jersey	7,364,823	7,730,188	5.0	114,161	127,584	11.8	207,449	196,702	-5.2	321,610	324,286	0.8
New Mexico	1,302,894	1,515,069	16.3	10,104	35,570	252.0	48,179	49,930	3.6	58,283	85,500	46.7
New York	17,558,072	17,990,455	2.5	280,559	281,461	0.3	711,678	772,050	8.5	992,237	1,053,511	6.2
North Carolina	5,881,766	6,628,637	12.7	115,523	141,918	22.8	172,014	210,220	22.2	287,537	352,138	22.5
North Dakota	652,717	638,800	-2.1	7,501	7,621	1.6	26,568	30,257	13.9	34,069	37,878	11.2
Ohio	10,797,630	10,847,115	0.5	137,194	155,679	13.5	351,951	402,928	14.5	489,145	558,607	14.2
Oklahoma	3,025,290	3,145,585	4.0	51,904	62,518	20.4	108,391	110,703	2.1	160,295	173,221	8.1
Oregon	2,633,105	2,842,321	7.9	75,017	77,061	2.7	82,441	88,680	7.6	157,458	165,741	5.3
Pennsylvania	11,863,895	11,881,643	0.1	118,346	154,372	30.4	388,655	449,688	15.7	507,001	604,060	19.1
Rhode Island	947,154	1,003,464	5.9	12,698	16,620	30.9	54,171	61,653	13.8	66,869	78,273	17.1
South Carolina	3,121,820	3,486,703	11.7	45,252	54,212	19.8	87,224	105,090	20.5	132,476	159,302	20.2
South Dakota	690,768	696,004	0.8	1,200	394	-67.2	31,561	33,814	7.1	32,761	34,208	4.4
Tennessee	4,591,120	4,877,185	6.2	54,802	70,262	28.2	149,779	155,976	4.1	204,581	226,238	10.6
Texas	14,229,191	16,986,510	19.4	267,902	389,355	45.3	433,489	512,082	18.1	701,391	901,437	28.5
Utah	1,461,037	1,722,850	17.9	16,164	30,087	86.1	77,823	91,216	17.2	93,987	121,303	29.1
Vermont	511,456	562,758	10.0	4,060	6,861	69.0	26,568	29,537	11.2	30,628	36,398	18.8
Virginia	5,346,818	6,187,358	15.7	112,180	135,343	20.6	168,324	218,099	29.6	280,504	353,442	26.0
Washington	4,132,156	4,866,692	17.8	192,665	148,448	-23.0	110,938	114,936	3.6	303,603	263,384	-13.2
West Virginia	1,949,644	1,793,477	-8.0	11,322	13,548	19.7	70,651	71,242	0.8	81,973	84,790	3.4
Wisconsin	4,705,767	4,891,769	4.0	89,699	101,988	13.7	179,387	197,786	10.3	269,086	299,774	11.4
Wyoming	469,557	453,588	-3.4	12,107	18,809	55.4	9,014	12,517	38.9	21,121	31,326	48.3

Sources: Bureau of the Census, 1990 Census. U. S. Department of Education, National Center for Education Statistics, 1980 Higher Education Information System (HEGIS) and 1990 Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Surveys.

Note Although the HEGIS and IPEDS data reported here are historically comparable in items of the reporting institutions, there are some differences in imputation procedures used in the two surveys. accredited by an agency recognized by the U.S. Department of Education.

Table 18
African American Higher Education Enrollment by State and Type of Institution, 1980 and 1990

	Percent of State Population		Percent Change	TWO-YEAR INSTITUTIONS					FOUR-YEAR INSTITUTIONS					ALL INSTITUTIONS		
	1980	1990	1980-90	1980	Percent of Enrollment 1980	1990	Percent of Enrollment 1990	Percent Change 1980-90	1980	Percent of Enrollment 1980	1990	Percent of Enrollment 1990	Percent Change 1980-90	1980	1990	Percent Change 1980-90
STATES																
Alabama	25.6	25.3	2.4	10,359	23.9	20,384	19.3	96.78	25,148	20.8	27,964	19.7	11.20	35,507	48,348	36.2
Alaska	3.4	4.1	64.6	307	2.6	71	18.0	-76.9	214	2.3	1,008	3.4	371.0	521	1,079	107.1
Arizona	2.8	3.0	47.4	3,781	3.3	4,884	3.1	29.2	1,766	2.0	2,720	2.5	54.0	5,547	7,604	37.1
Arkansas	16.3	15.9	0.0	2,439	17.9	2,800	14.6	14.8	9,025	14.1	9,388	13.2	4.0	11,464	12,188	6.3
California	7.7	7.4	21.4	104,383	9.2	79,712	7.5	-23.6	38,017	5.8	38,690	5.5	1.8	142,400	118,402	-16.9
Colorado	3.5	4.0	30.9	1,428	3.2	2,966	3.9	107.7	3,178	2.7	3,976	2.6	25.1	4,606	6,942	50.7
Connecticut	7.0	8.3	26.1	3,501	8.1	4,141	9.0	18.3	4,387	3.8	5,814	4.7	32.5	7,888	9,955	26.2
Delaware	16.1	16.9	17.3	1,202	15.3	1,536	14.2	27.8	2,365	9.4	3,174	10.2	34.2	3,567	4,710	32.0
DC	70.3	65.8	-11.0	0	N/A	0	0.0	N/A	27,163	31.3	24,421	30.3	-10.1	27,163	24,421	-10.1
Florida	13.8	13.6	31.0	21,541	10.2	32,004	11.9	48.6	20,812	10.4	29,064	10.8	39.7	42,353	61,068	44.2
Georgia	26.8	27.0	19.2	8,766	19.3	13,333	20.7	52.1	25,680	18.6	35,871	19.1	39.7	34,446	49,204	42.8
Hawaii	1.8	2.5	56.6	231	1.2	297	1.5	28.6	389	1.4	1,235	3.7	217.5	620	1,532	147.1
Idaho	0.3	0.3	24.1	26	0.2	53	0.4	103.8	234	0.8	257	0.7	9.8	260	310	19.2
Illinois	14.7	14.8	1.1	38,968	12.6	52,354	14.5	34.4	34,287	10.2	36,864	10.0	7.5	73,255	89,218	21.8
Indiana	7.6	7.8	4.2	4,178	12.4	3,508	8.7	-16.0	11,145	5.2	12,258	5.0	10.0	15,323	15,766	2.9
Iowa	1.4	1.7	15.3	805	2.2	1,161	2.2	44.2	2,454	2.4	2,883	2.4	17.5	3,259	4,044	24.1
Kansas	5.3	5.8	13.4	1,889	5.0	3,138	5.2	66.1	3,784	3.8	3,704	3.6	-2.1	5,673	6,842	20.6
Kentucky	7.1	7.1	1.3	3,017	12.5	3,160	6.8	4.7	6,831	5.9	7,331	5.6	7.3	9,848	10,491	6.5
Louisiana	29.4	30.8	4.9	4,609	32.0	6,213	26.0	34.8	31,003	21.5	38,635	23.7	24.6	35,612	44,848	25.9
Maine	0.3	0.4	64.3	24	0.3	8	0.1	-66.7	155	0.4	288	0.6	85.8	179	296	65.4
Maryland	22.7	24.9	24.2	17,778	19.0	19,603	17.7	10.3	20,728	15.7	24,979	16.2	20.5	38,506	44,582	15.8
Massachusetts	3.9	5.0	35.6	3,569	3.9	5,665	6.4	58.7	11,179	3.4	12,808	3.9	14.6	14,748	18,473	25.3
Michigan	12.9	13.9	7.7	27,004	12.3	25,386	11.0	-6.0	25,433	8.4	31,400	9.2	23.5	52,437	56,786	8.3
Minnesota	1.3	2.2	78.0	457	1.1	1,544	2.2	237.9	1,890	1.1	2,599	1.4	37.5	2,347	4,143	76.5
Mississippi	35.2	35.6	3.1	11,333	29.0	13,745	25.7	21.3	18,713	29.6	19,954	28.7	6.6	30,046	33,699	12.2
Missouri	10.5	10.7	6.6	8,820	16.1	9,098	11.5	3.2	12,002	6.7	14,061	6.7	17.2	20,822	23,159	11.2
Montana	0.2	0.3	33.3	1	0.0	1	0.0	0.0	141	0.5	113	0.4	-19.9	142	114	-19.7
Nebraska	3.1	3.6	18.6	719	3.3	866	2.5	20.4	1,925	2.8	1,857	2.4	-3.5	2,644	2,723	3.0
Nevada	6.4	6.6	54.5	2,144	10.0	1,711	5.3	-20.2	618	3.2	1,220	4.1	97.4	2,762	2,931	6.1
New Hampshire	0.4	0.6	80.4	40	0.6	146	1.3	265.0	705	1.8	523	1.1	-25.8	745	669	-10.2
New Jersey	12.6	13.4	12.1	13,887	12.2	15,179	11.9	9.3	18,340	8.8	17,951	9.1	-2.1	32,227	33,130	2.8
New Mexico	1.8	2.0	25.8	223	2.2	1,148	3.2	414.8	1,046	2.2	1,023	2.0	-2.2	1,269	2,171	71.1
New York	13.7	15.9	19.0	35,668	12.7	38,043	13.8	6.7	69,985	9.8	84,021	11.0	20.1	105,653	122,064	15.5
North Carolina	22.4	22.0	10.4	23,734	20.5	25,318	17.9	6.7	31,419	18.3	36,725	17.5	16.9	55,153	62,043	12.5
North Dakota	0.4	0.6	37.2	21	0.3	75	1.0	257.1	151	0.6	171	0.6	13.2	172	246	43.0
Ohio	10.0	10.6	7.3	15,668	11.4	17,471	11.3	11.5	30,009	8.5	29,608	7.4	-1.3	45,677	47,079	3.1
Oklahoma	6.8	7.4	14.2	3,559	6.9	4,681	7.5	31.5	5,857	5.4	7,135	6.4	21.8	9,416	11,816	25.5
Oregon	1.4	1.6	24.6	589	0.8	1,035	1.3	75.7	1,007	1.2	1,216	1.4	20.8	1,596	2,251	41.0
Pennsylvania	8.8	9.2	4.1	13,826	11.7	20,159	13.1	45.8	24,270	6.2	23,850	5.3	-1.7	38,096	44,009	15.5
Rhode Island	2.9	3.9	40.9	520	4.1	692	4.2	33.1	1,692	3.1	1,866	3.0	10.3	2,212	2,558	15.6
South Carolina	30.4	29.8	9.6	14,067	31.1	13,042	24.1	-7.3	15,215	17.4	18,135	17.3	19.2	29,282	31,177	6.5
South Dakota	0.3	0.5	52.0	0	0.0	0	0.0	N/A	312	1.0	250	0.7	-19.9	312	250	-19.9
Tennessee	15.8	16.0	7.2	10,468	19.1	10,285	14.6	-1.7	20,431	13.6	20,955	13.4	2.6	30,899	31,240	1.1
Texas	12.0	11.9	18.2	28,104	10.5	38,632	9.9	37.5	35,876	8.3	41,826	8.2	16.6	63,980	80,458	25.8
Utah	0.6	0.7	25.5	82	0.5	165	0.5	101.2	452	0.6	496	0.5	9.7	534	661	23.8
Vermont	0.2	0.3	71.9	7	0.2	21	0.3	200.0	311	1.2	354	1.2	13.8	318	375	17.9
Virginia	18.9	18.8	15.3	15,453	13.8	17,955	13.3	16.2	25,290	15.0	31,611	14.5	25.0	40,743	49,566	21.7
Washington	2.6	3.1	41.9	4,108	2.1	4,692	3.2	14.2	2,473	2.2	2,668	2.3	7.9	6,581	7,360	11.8
West Virginia	3.3	3.1	-13.5	406	3.6	458	3.4	12.8	2,815	4.0	2,702	3.8	-4.0	3,221	3,160	-1.9
Wisconsin	3.9	5.0	33.9	4,098	4.6	5,589	5.5	36.4	5,073	2.8	5,078	2.6	0.1	9,171	10,667	16.3
Wyoming	0.7	0.8	7.2	101	0.8	178	0.9	76.2	75	0.8	106	0.8	41.3	176	284	61.4

Sources: Bureau of the Census, 1990 Census. U. S. Department of Education, National Center for Education Statistics, 1980 Higher Education Information System (HEGIS) and 1990 Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Surveys.

Note Although the HEGIS and IPEDS data reported here are historically comparable in items of the reporting institutions, there are some differences in imputation procedures used in the two surveys. accredited by an agency recognized by the U.S. Department of Education.

Table 19
Hispanic Higher Education Enrollment by State and Type of Institution, 1980 and 1990

	Percent of State Population		Percent Change	TWO-YEAR INSTITUTIONS					FOUR-YEAR INSTITUTIONS					ALL INSTITUTIONS		
	1980	1990	1980-90	1980	Percent 1980	1990	Percent 1990	Percent Change 1980-90	1980	Percent 1980	1990	Percent 1990	Percent Change 1980-90	1980	1990	Percent Change 1980-90
STATES																
Alabama	0.9	0.6	-26.0	93	0.2	266	0.3	186.0	593	0.5	872	0.6	47.0	686	1,138	65.9
Alaska	2.4	3.2	87.3	129	1.1	18	4.6	-86.0	88	0.9	616	2.1	600.0	217	634	192.2
Arizona	16.2	18.8	56.2	11,282	10.0	21,518	13.9	90.7	3,855	4.3	8,311	7.6	115.6	15,137	29,829	97.1
Arkansas	0.8	0.8	11.0	46	0.3	96	0.5	108.7	165	0.3	335	0.5	103.0	211	431	104.3
California	19.2	25.8	69.2	121,407	10.7	155,682	14.6	28.2	46,270	7.1	77,845	11.1	68.2	167,677	233,527	39.3
Colorado	11.8	12.9	24.9	3,677	8.1	7,886	10.3	114.5	5,401	4.6	9,430	6.1	74.6	9,078	17,316	90.7
Connecticut	4.0	6.5	71.2	935	2.2	2,451	5.3	162.1	1,811	1.6	3,200	2.6	76.7	2,746	5,651	105.8
Delaware	1.6	2.4	63.8	96	1.2	234	2.2	143.8	148	0.6	312	1.0	110.8	244	546	123.8
DC	2.8	5.4	85.0	0	N/A	0	N/A	N/A	1,591	1.8	2,405	3.0	51.2	1,591	2,405	51.2
Florida	8.8	12.2	83.4	18,834	8.9	39,729	14.7	110.9	13,456	6.7	26,283	9.8	95.3	32,290	66,012	104.4
Georgia	1.1	1.7	77.8	350	0.8	555	0.9	58.6	873	0.6	2,185	1.2	150.3	1,223	2,740	124.0
Hawaii	7.4	7.3	14.2	727	3.8	400	2.0	-45.0	520	1.9	665	2.0	27.9	1,247	1,065	-14.6
Idaho	3.9	5.3	44.6	75	0.6	205	1.5	173.3	556	1.8	799	2.1	43.7	631	1,004	59.1
Illinois	5.6	7.9	42.3	7,514	2.4	35,419	9.8	371.4	8,213	2.4	13,513	3.7	64.5	15,727	48,932	211.1
Indiana	1.6	1.8	13.5	369	1.1	552	1.4	49.6	2,397	1.1	3,988	1.6	66.4	2,766	4,540	64.1
Iowa	0.9	1.2	27.8	288	0.8	330	0.6	14.6	558	0.5	1,257	1.1	125.3	846	1,587	87.6
Kansas	2.7	3.8	47.9	600	1.6	1,364	2.3	127.3	1,339	1.4	2,189	2.1	63.5	1,939	3,553	83.2
Kentucky	0.7	0.6	-19.8	62	0.3	182	0.4	193.5	452	0.4	556	0.4	23.0	514	738	43.6
Louisiana	2.4	2.2	-6.1	359	2.5	687	2.9	91.4	2,118	1.5	2,790	1.7	31.7	2,477	3,477	40.4
Maine	0.4	0.6	36.4	12	0.1	9	0.1	-25.0	72	0.2	186	0.4	158.3	84	195	132.1
Maryland	1.5	2.6	93.2	1,385	1.5	2,169	2.0	56.6	1,506	1.1	2,857	1.9	89.7	2,891	5,026	73.8
Massachusetts	2.5	4.8	103.9	1,368	1.5	4,061	4.6	196.9	4,668	1.4	8,558	2.6	83.3	6,036	12,619	109.1
Michigan	1.8	2.2	24.1	3,354	1.5	3,701	1.6	10.3	2,839	0.9	5,393	1.6	90.0	6,193	9,094	46.8
Minnesota	0.8	1.2	67.7	172	0.4	478	0.7	177.9	876	0.5	1,458	0.8	66.4	1,048	1,936	84.7
Mississippi	1.0	0.6	-35.6	81	0.2	177	0.3	118.5	172	0.3	218	0.3	26.7	253	395	56.1
Missouri	1.1	1.2	19.5	431	0.8	732	0.9	69.8	1,492	0.8	2,710	1.3	81.6	1,923	3,442	79.0
Montana	1.3	1.5	22.1	15	0.4	29	0.6	93.3	125	0.4	251	0.8	100.8	140	280	100.0
Nebraska	1.8	2.3	31.9	281	1.3	498	1.5	77.2	610	0.9	1,061	1.4	73.9	891	1,559	75.0
Nevada	6.7	10.4	130.9	845	4.0	2,165	6.8	156.2	420	2.2	1,243	4.2	196.0	1,265	3,408	169.4
New Hampshire	0.6	1.0	102.8	20	0.3	44	0.4	120.0	254	0.6	446	0.9	75.6	274	490	78.8
New Jersey	6.7	9.6	50.4	5,444	4.8	9,752	7.6	79.1	8,306	4.0	11,919	6.1	43.5	13,750	21,671	57.6
New Mexico	36.6	38.2	21.4	2,163	21.4	10,677	29.9	393.6	12,073	25.1	12,927	25.9	7.1	14,236	23,604	65.8
New York	9.5	12.3	33.4	18,751	6.7	25,863	9.3	37.9	35,026	4.9	54,300	7.1	55.0	53,777	80,163	49.1
North Carolina	1.0	1.2	35.4	448	0.4	980	0.7	118.8	724	0.4	1,549	0.7	114.0	1,172	2,529	115.8
North Dakota	0.6	0.7	19.6	6	0.1	25	0.3	316.7	62	0.2	170	0.6	174.2	68	195	186.8
Ohio	1.1	1.3	16.5	1,096	0.8	1,773	1.1	61.8	2,325	0.7	3,859	1.0	66.0	3,421	5,632	64.6
Oklahoma	1.9	2.7	50.1	639	1.2	983	1.6	53.8	974	0.9	1,652	1.5	69.6	1,613	2,635	63.4
Oregon	2.5	4.0	71.2	753	1.0	1,490	1.9	97.9	848	1.0	1,635	1.8	92.8	1,601	3,125	95.2
Pennsylvania	1.3	2.0	50.9	1,058	0.9	2,720	1.8	157.1	2,902	0.7	4,989	1.1	71.9	3,960	7,709	94.7
Rhode Island	2.1	4.6	132.2	221	1.7	540	3.2	144.3	675	1.2	1,066	1.7	57.9	896	1,606	79.2
South Carolina	1.1	0.9	-8.6	293	0.6	329	0.6	12.3	301	0.3	582	0.6	93.4	594	911	53.4
South Dakota	0.6	0.8	30.5	0	0.0	0	0.0	N/A	243	0.8	94	0.3	-61.3	243	94	-61.3
Tennessee	0.7	0.7	-3.9	204	0.4	303	0.4	48.5	621	0.4	999	0.6	60.9	825	1,302	57.8
Texas	21.0	25.5	45.4	43,348	16.2	77,615	19.9	79.1	42,211	9.7	70,681	13.8	67.4	85,559	148,296	73.3
Utah	4.1	4.9	40.3	376	2.3	894	3.0	137.8	966	1.2	1,339	1.5	38.6	1,342	2,233	66.4
Vermont	0.6	0.7	10.8	3	0.1	14	0.2	366.7	155	0.6	414	1.4	167.1	158	428	170.9
Virginia	1.5	2.6	100.7	1,006	0.9	2,338	1.7	132.4	1,012	0.6	2,465	1.1	143.6	2,018	4,803	138.0
Washington	2.9	4.4	78.8	3,221	1.7	3,763	2.5	16.8	1,264	1.1	2,372	2.1	87.7	4,485	6,135	36.8
West Virginia	0.7	0.5	-33.2	29	0.3	33	0.2	13.8	203	0.3	327	0.5	61.1	232	360	55.2
Wisconsin	1.3	1.9	48.0	980	1.1	1,957	1.9	99.7	1,613	0.9	2,735	1.4	69.6	2,593	4,692	80.9
Wyoming	5.2	5.7	5.1	246	2.0	562	3.0	128.5	105	1.2	343	2.7	226.7	351	905	157.8

Source: Bureau of the Census, 1990 Census; U.S. Department of Education, National Center for Education Statistics, 1980 Higher Education Information System (HEGIS) and 1990 Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Surveys.

Note: Although the HEGIS and IPEDS data reported here are historically comparable in items of the reporting institutions, there are some differences in imputation procedures used in the two surveys.

Table 20
Asian American Higher Education Enrollment by State and Type of Institution, 1980 and 1990

	Percent of State Population		Percent Change	TWO-YEAR INSTITUTIONS					FOUR-YEAR INSTITUTIONS					ALL INSTITUTIONS		
	1980	1990	1980-90	1980	Percent 1980	1990	Percent 1990	Percent Change 1980-90	1980	Percent 1980	1990	Percent 1990	Percent Change 1980-90	1980	1990	Percent Change 1980-90
STATES																
Alabama	0.2	0.5	123.9	57	0.1	379	0.4	564.9	830	0.7	1,332	0.9	60.5	887	1,711	92.9
Alaska	2.0	3.6	144.9	133	0.3	6	1.5	-95.5	130	0.1	734	2.5	464.6	263	740	181.4
Arizona	0.8	1.5	150.6	1,580	1.4	2,784	1.8	76.2	909	1.0	3,322	3.0	265.5	2,489	6,106	145.3
Arkansas	0.3	0.5	85.9	129	0.9	182	0.9	41.1	376	0.6	558	0.8	48.4	505	740	46.5
California	5.3	9.6	127.0	71,653	6.3	111,355	10.4	55.4	57,645	8.8	116,017	16.5	101.3	129,298	227,372	75.9
Colorado	1.0	1.8	100.1	439	1.0	1,294	1.7	194.8	1,754	1.5	4,123	2.7	135.1	2,193	5,417	147.0
Connecticut	0.6	1.5	167.3	329	0.8	828	1.8	151.7	1,303	1.1	3,536	2.9	171.4	1,632	4,364	167.4
Delaware	0.7	1.4	120.3	73	0.9	182	1.7	149.3	126	0.5	528	1.7	319.0	199	710	256.8
DC	1.0	1.8	120.3	0	N/A	0	N/A	N/A	1,972	2.3	3,237	4.0	64.1	1,972	3,237	64.1
Florida	0.6	1.2	171.9	1,991	0.9	5,670	2.1	184.8	1,824	0.9	6,487	2.4	255.6	3,815	12,157	218.7
Georgia	0.4	1.2	208.6	362	0.8	871	1.4	140.6	826	0.6	3,370	1.8	308.0	1,188	4,241	257.0
Hawaii	60.5	61.8	17.5	14,029	72.5	15,419	77.2	9.9	15,817	56.9	17,501	51.8	10.6	29,846	32,920	10.3
Idaho	0.6	0.9	57.4	19	0.2	121	0.9	536.8	561	1.8	585	1.5	4.3	580	706	21.7
Illinois	1.4	2.5	78.7	5,640	1.8	13,636	3.8	141.8	8,060	2.4	18,717	5.1	132.2	13,700	32,353	136.2
Indiana	0.4	0.7	83.0	152	0.5	206	0.5	35.5	1,510	0.7	3,820	1.6	153.0	1,662	4,026	142.2
Iowa	0.4	0.9	120.1	300	0.8	517	1.0	72.3	733	0.7	1,913	1.6	161.0	1,033	2,430	135.2
Kansas	0.6	1.3	110.6	213	0.6	672	1.1	215.5	635	0.6	2,045	2.0	222.0	848	2,717	220.4
Kentucky	0.3	0.5	78.7	109	0.5	259	0.6	137.6	678	0.6	1,084	0.8	59.9	787	1,343	70.6
Louisiana	0.6	1.0	72.8	106	0.7	278	1.2	162.3	800	0.6	2,312	1.4	189.0	906	2,590	185.9
Maine	0.3	0.5	126.8	9	0.1	81	1.0	800.0	101	0.3	337	0.7	233.7	110	418	280.0
Maryland	1.5	2.9	117.4	1,533	1.6	4,020	3.6	162.2	2,911	2.2	7,674	5.0	163.6	4,444	11,694	163.1
Massachusetts	0.9	2.4	189.7	442	0.5	2,478	2.8	460.6	4,628	1.4	13,811	4.2	198.4	5,070	16,289	221.3
Michigan	0.6	1.1	84.9	1,691	0.8	2,746	1.2	62.4	3,102	1.0	7,947	2.3	156.2	4,793	10,693	123.1
Minnesota	0.7	1.8	193.5	317	0.8	1,127	1.6	255.5	1,610	1.0	3,821	2.1	137.3	1,927	4,948	156.8
Mississippi	0.3	0.5	75.6	83	0.2	204	0.4	145.8	225	0.4	579	0.8	157.3	308	783	154.2
Missouri	0.5	0.8	78.7	322	0.6	742	0.9	130.4	1,670	0.9	3,847	1.8	130.4	1,992	4,589	130.4
Montana	0.3	0.5	70.2	5	0.1	12	0.2	140.0	116	0.4	108	0.3	-6.9	121	120	-0.8
Nebraska	0.4	0.8	77.4	120	0.6	267	0.8	122.5	503	0.7	911	1.2	81.1	623	1,178	89.1
Nevada	1.8	3.2	169.2	473	0.9	1,403	4.4	196.6	411	0.2	1,156	3.9	181.3	884	2,559	189.5
New Hampshire	0.3	0.8	219.0	11	0.2	107	1.0	872.7	196	0.5	653	1.4	233.2	207	760	267.1
New Jersey	1.4	3.5	162.4	1,684	1.5	4,513	3.5	168.0	3,391	1.6	9,934	5.1	193.0	5,075	14,447	184.7
New Mexico	0.5	0.9	106.9	70	0.7	431	1.2	515.7	407	0.8	684	1.4	68.1	477	1,115	133.8
New York	1.8	3.9	123.4	3,712	1.3	7,758	2.8	109.0	18,894	2.7	43,282	5.7	129.1	22,606	51,040	125.8
North Carolina	0.4	0.8	146.3	599	0.5	1,391	1.0	132.2	1,029	0.6	4,230	2.0	311.1	1,628	5,621	245.3
North Dakota	0.3	0.5	74.9	3	0.0	30	0.4	900.0	109	0.4	255	0.8	133.9	112	285	154.5
Ohio	0.4	0.8	90.7	688	0.5	1,341	0.9	94.9	2,509	0.7	6,198	1.5	147.0	3,197	7,539	135.8
Oklahoma	0.6	1.1	94.3	583	1.1	985	1.6	69.0	1,056	1.0	1,919	1.7	81.7	1,639	2,904	77.2
Oregon	1.3	2.4	99.2	1,318	1.8	2,348	3.0	78.1	2,585	3.1	4,364	4.9	68.8	3,903	6,712	72.0
Pennsylvania	0.5	1.2	113.5	1,088	0.9	2,349	1.5	115.9	3,647	0.9	11,239	2.5	208.2	4,735	13,588	187.0
Rhode Island	0.6	1.8	245.6	50	0.4	306	1.8	512.0	609	1.1	1,585	2.6	160.3	659	1,891	186.9
South Carolina	0.4	0.6	89.1	253	0.6	502	0.9	98.4	433	0.5	992	0.9	129.1	686	1,494	117.8
South Dakota	0.3	0.4	79.7	1	0.1	1	0.3	0.0	106	0.3	197	0.6	85.8	107	198	85.0
Tennessee	0.3	0.7	128.0	223	0.4	572	0.8	156.5	604	0.4	1,711	1.1	183.3	827	2,283	176.1
Texas	0.8	1.9	165.5	2,674	1.0	10,593	2.7	296.1	4,652	1.1	17,314	3.4	272.2	7,326	27,907	280.9
Utah	1.0	1.9	121.4	321	2.0	804	2.7	150.5	1,279	1.6	1,439	1.6	12.5	1,600	2,243	40.2
Vermont	0.3	0.6	137.3	4	0.1	21	0.3	425.0	85	0.3	548	1.9	544.7	89	569	539.3
Virginia	1.2	2.6	140.2	1,990	1.8	4,620	3.4	132.2	1,741	1.0	6,780	3.1	289.4	3,731	11,400	205.5
Washington	2.5	4.3	105.7	5,900	3.1	7,326	4.9	24.2	4,714	4.2	8,112	7.1	72.1	10,614	15,438	45.4
West Virginia	0.3	0.4	43.6	36	0.3	67	0.5	86.1	277	0.4	621	0.9	124.2	313	688	119.8
Wisconsin	0.4	1.1	195.0	773	0.9	1,324	1.3	71.3	1,450	0.8	3,667	1.9	152.9	2,223	4,991	124.5
Wyoming	0.4	0.6	42.5	59	0.5	99	0.5	67.8	50	0.6	85	0.7	70.0	109	184	68.8

Source: Bureau of the Census, 1990 Census. U.S. Department of Education, National Center for Education Statistics, 1980 Higher Education Information System (HEGIS) and 1990 Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Surveys.

Note: Although the HEGIS and IPEDS data reported here are historically comparable in items of the reporting institutions, there are some differences in imputation procedures used in the two surveys.

Table 21

American Indian Higher Education Enrollment by State and Type of Institution, 1980 and 1990

	Percent of State Population		Percent Change	TWO-YEAR INSTITUTIONS					FOUR-YEAR INSTITUTIONS					ALL INSTITUTIONS		
	1980	1990	1980-90	1980	Percent 1980	1990	Percent 1990	Percent Change 1980-90	1980	Percent 1980	1990	Percent 1990	Percent Change 1980-90	1980	1990	Percent Change 1980-90
STATES																
Alabama	0.2	0.4	117.7	69	0.2	243	0.2	252.2	174	0.1	350	0.2	101.1	243	593	144.0
Alaska	16.0	15.6	33.7	662	5.5	59	15.0	-91.1	684	7.4	2,589	8.8	278.5	1,346	2,648	96.7
Arizona	5.6	5.6	33.2	5,833	5.1	6,610	4.3	13.3	1,254	1.4	2,223	2.0	77.3	7,087	8,833	24.6
Arkansas	0.4	0.5	35.5	112	0.8	133	0.7	18.8	428	0.7	305	0.4	-28.7	540	438	-18.9
California	0.9	0.8	20.3	17,084	1.5	15,139	1.4	-11.4	5,751	0.9	6,162	0.9	7.1	22,835	21,301	-6.7
Colorado	0.6	0.8	53.7	438	1.0	953	1.2	117.6	728	0.6	1,362	0.9	87.1	1,166	2,315	98.5
Connecticut	0.1	0.2	46.8	130	0.3	132	0.3	1.5	339	0.3	300	0.2	-11.5	469	432	-7.9
Delaware	0.2	0.3	52.0	18	0.2	44	0.4	144.4	26	0.1	55	0.2	111.5	44	99	125.0
DC	0.2	0.2	42.2	0	N/A	0	N/A	N/A	312	0.4	266	0.3	-14.7	312	266	-14.7
Florida	0.2	0.3	88.7	669	0.3	1,333	0.5	99.3	340	0.2	610	0.2	79.4	1,009	1,943	92.6
Georgia	0.1	0.2	75.3	119	0.3	200	0.3	68.1	170	0.1	348	0.2	104.7	289	548	89.6
Hawaii	0.3	0.5	84.2	48	0.2	61	0.3	27.1	75	0.3	144	0.4	92.0	123	205	66.7
Idaho	1.1	1.4	31.0	63	0.5	97	0.7	54.0	323	1.0	388	1.0	20.1	386	485	25.6
Illinois	0.1	0.2	34.1	1,606	0.5	1,350	0.4	-15.9	818	0.2	895	0.2	9.4	2,424	2,245	-7.4
Indiana	0.1	0.2	62.3	276	0.8	203	0.5	-26.4	380	0.2	602	0.2	58.4	656	805	22.7
Iowa	0.2	0.3	34.7	274	0.7	191	0.4	-30.3	214	0.2	250	0.2	16.8	488	441	-9.6
Kansas	0.7	0.9	42.9	1,258	3.3	1,264	2.1	0.5	489	0.5	708	0.7	44.8	1,747	1,972	12.9
Kentucky	0.1	0.2	59.8	90	0.4	285	0.6	216.7	262	0.2	221	0.2	-15.6	352	506	43.8
Louisiana	0.3	0.4	53.7	64	0.4	240	1.0	275.0	273	0.2	618	0.4	126.4	337	858	154.6
Maine	0.4	0.5	46.8	27	0.3	98	1.2	263.0	132	0.4	300	0.6	127.3	159	398	150.3
Maryland	0.2	0.3	61.7	262	0.3	469	0.4	79.0	382	0.3	383	0.2	0.3	644	852	32.3
Massachusetts	0.1	0.2	58.1	209	0.2	351	0.4	67.9	649	0.2	847	0.3	30.5	858	1,198	39.6
Michigan	0.4	0.6	38.9	1,568	0.7	1,776	0.8	13.3	1,219	0.4	1,771	0.5	45.3	2,787	3,547	27.3
Minnesota	0.9	1.1	42.5	162	0.4	821	1.2	406.8	849	0.5	1,181	0.6	39.1	1,011	2,002	98.0
Mississippi	0.2	0.3	37.9	91	0.2	246	0.5	170.3	115	0.2	131	0.2	13.9	206	377	83.0
Missouri	0.3	0.4	61.0	178	0.3	239	0.3	34.3	534	0.3	896	0.4	67.8	712	1,135	59.4
Montana	4.7	6.0	27.9	816	20.8	1,529	31.8	87.4	744	2.4	898	2.9	20.7	1,560	2,427	55.6
Nebraska	0.6	0.8	35.0	387	1.8	452	1.3	16.8	175	0.3	277	0.4	58.3	562	729	29.7
Nevada	1.7	1.6	47.6	451	2.1	824	2.6	82.7	131	0.7	219	0.7	67.2	582	1,043	79.2
New Hampshire	0.1	0.2	57.8	7	0.1	23	0.2	228.6	115	0.3	206	0.4	79.1	122	229	87.7
New Jersey	0.1	0.2	78.3	224	0.2	313	0.2	39.7	719	0.3	459	0.2	-36.2	943	772	-18.1
New Mexico	8.1	8.9	26.6	918	9.1	3,100	8.7	237.7	1,294	2.7	1,497	3.0	15.7	2,212	4,597	107.8
New York	0.2	0.3	58.3	1,729	0.6	1,085	0.4	-37.2	3,196	0.4	2,063	0.3	-35.5	4,925	3,148	-36.1
North Carolina	1.1	1.2	24.0	1,032	0.9	1,513	1.1	46.6	1,092	0.6	1,571	0.7	43.9	2,124	3,084	45.2
North Dakota	3.1	4.1	28.6	364	4.9	1,121	14.7	208.0	426	1.6	495	1.6	16.2	790	1,616	104.6
Ohio	0.1	0.2	66.3	461	0.3	565	0.4	22.6	807	0.2	968	0.2	20.0	1,268	1,533	20.9
Oklahoma	5.6	8.0	49.0	2,138	4.1	3,748	2.4	75.3	3,794	3.5	5,861	1.5	54.5	5,932	9,609	62.0
Oregon	1.0	1.4	40.9	754	1.0	838	1.1	11.1	760	0.9	938	1.0	23.4	1,514	1,776	17.3
Pennsylvania	0.1	0.1	55.7	233	0.2	352	0.2	51.1	622	0.2	659	0.1	5.9	855	1,011	18.2
Rhode Island	0.3	0.4	40.5	36	0.3	108	0.6	200.0	110	0.2	114	0.2	3.6	146	222	52.1
South Carolina	0.2	0.2	43.2	82	0.2	163	0.3	98.8	93	0.1	171	0.2	83.9	175	334	90.9
South Dakota	6.5	7.3	12.5	418	34.8	124	31.5	-70.3	935	3.0	1,788	5.3	91.2	1,353	1,912	41.3
Tennessee	0.1	0.2	96.7	121	0.2	176	0.3	45.5	251	0.2	300	0.2	19.5	372	476	28.0
Texas	0.3	0.4	64.4	1,094	0.4	1,493	0.4	36.5	1,498	0.3	1,513	0.3	1.0	2,592	3,006	16.0
Utah	1.3	1.4	26.1	255	1.6	736	2.4	188.6	762	1.0	586	0.6	-23.1	1,017	1,322	30.0
Vermont	0.2	0.3	72.4	0	0.0	29	0.4	N/A	40	0.2	102	0.3	155.0	40	131	227.5
Virginia	0.2	0.2	61.6	273	0.2	368	0.3	34.8	366	0.2	492	0.2	34.4	639	860	34.6
Washington	1.5	1.7	34.0	2,677	1.4	2,532	1.7	-5.4	1,063	1.0	1,342	1.2	26.2	3,740	3,874	3.6
West Virginia	0.1	0.1	52.7	53	0.5	28	0.2	-47.2	139	0.2	111	0.2	-20.1	192	139	-27.6
Wisconsin	0.6	0.8	33.5	1,011	1.1	834	0.8	-17.5	763	0.4	1,216	0.6	59.4	1,774	2,050	15.6
Wyoming	1.5	2.1	33.6	150	1.2	310	1.6	106.7	43	0.5	134	1.1	211.6	193	444	130.1

Source: Bureau of the Census 1990 Census. U.S. Department of Education, National Center for Education Statistics, 1980 Higher Education Information System (HEGIS) and 1990 Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Surveys.

Note: Although the HEGIS and IPEDS data reported here are historically comparable in items of the reporting institutions, there are some differences in imputation procedures used in the two surveys.

Table 22
Total Graduate and Professional Enrollments by State, 1980 and 1990

	GRADUATE ENROLLMENT			PROFESSIONAL ENROLLMENT		
	1980	1990	Percent Change 1980-90	1980	1990	Percent Change 1980-90
STATES						
Alabama	14,285	20,225	41.6	3,548	3,282	-7.5
Alaska	910	1,240	36.3	13	0	-100.0
Arizona	17,043	26,792	57.2	1,367	1,438	5.2
Arkansas	6,412	6,364	-0.7	1,567	1,555	-0.8
California	118,522	181,748	53.3	32,033	31,578	-1.4
Colorado	13,261	32,806	147.4	3,144	3,025	-3.8
Connecticut	25,904	31,878	23.1	3,027	3,210	6.0
Delaware	1,920	3,309	72.3	0	1,873	N/A
District of Columbia	20,593	22,502	9.3	9,605	8,348	-13.1
Florida	26,415	52,632	99.3	5,717	8,713	52.4
Georgia	22,193	29,605	33.4	6,333	7,792	23.0
Hawaii	3,657	6,692	83.0	515	444	-13.8
Idaho	2,745	6,692	143.8	292	506	73.3
Illinois	62,388	88,688	42.2	17,259	17,033	-1.3
Indiana	28,275	31,376	11.0	6,136	5,377	-12.4
Iowa	14,199	19,452	37.0	6,017	6,079	1.0
Kansas	14,861	19,426	30.7	2,356	2,163	-8.2
Kentucky	15,215	18,093	18.9	4,402	4,488	2.0
Louisiana	17,401	20,348	16.9	4,206	5,889	40.0
Maine	1,605	4,771	197.3	428	628	46.7
Maryland	21,318	36,330	70.4	3,605	4,457	23.6
Massachusetts	48,259	71,047	47.2	13,606	11,254	-17.3
Michigan	46,852	58,624	25.1	10,363	10,440	0.7
Minnesota	15,996	25,361	58.5	6,422	5,745	-10.5
Mississippi	8,236	10,415	26.5	1,642	2,135	30.0
Missouri	23,999	35,031	46.0	9,431	9,191	-2.5
Montana	1,878	3,479	85.3	244	210	-13.9
Nebraska	8,059	12,210	51.5	2,805	2,743	-2.2
Nevada	1,567	5,333	240.3	174	180	3.4
New Hampshire	3,242	7,885	143.2	544	683	25.6
New Jersey	30,909	41,615	34.6	5,688	6,163	8.4
New Mexico	6,315	10,133	60.5	644	610	-5.3
New York	118,775	167,396	40.9	24,696	26,867	8.8
North Carolina	18,644	29,686	59.2	5,571	6,064	8.8
North Dakota	1,638	2,169	32.4	503	495	-1.6
Ohio	51,578	63,428	23.0	13,339	12,166	-8.8
Oklahoma	14,829	20,741	39.9	3,732	3,332	-10.7
Oregon	10,148	15,772	55.4	3,678	3,689	0.3
Pennsylvania	55,469	75,979	37.0	16,619	13,694	-17.6
Rhode Island	5,821	9,467	62.6	396	307	-22.5
South Carolina	9,202	16,829	82.9	615	2,491	305.0
South Dakota	1,886	3,564	89.0	483	447	-7.5
Tennessee	14,547	22,285	53.2	7,069	5,244	-25.8
Texas	69,808	96,926	38.8	18,228	15,898	-12.8
Utah	7,591	9,464	24.7	1,721	1,202	-30.2
Vermont	2,294	4,137	80.3	733	615	-16.1
Virginia	22,409	45,177	101.6	5,099	6,193	21.5
Washington	14,424	19,922	38.1	3,619	3,148	-13.0
West Virginia	10,736	8,839	-17.7	1,354	1,291	-4.7
Wisconsin	19,362	29,452	52.1	3,622	3,547	-2.1
Wyoming	1,108	2,894	161.2	203	220	8.4

Source: U.S. Department of Education, National Center for Education Statistics, 1980 Higher Education Information System (HEGIS) and 1990 Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Surveys.

Note: Although the HEGIS and IPEDS data reported here are historically comparable in items of the reporting institutions, there are some differences in imputation procedures used in the two surveys.

Table 23

African American Graduate and Professional Enrollments by State, 1980 and 1990

	GRADUATE ENROLLMENT					PROFESSIONAL ENROLLMENT				
	1980	Percent 1980	1990	Percent 1990	Percent Change 1980-90	1980	Percent 1980	1990	Percent 1990	Percent Change 1980-90
STATES										
Alabama	1,879	13.2	2,198	10.9	17.0	310	27.9	234	6.6	-24.5
Alaska	21	2.3	11	0.9	-47.6	0	N/A	0	0.0	N/A
Arizona	175	1.0	606	2.3	246.3	8	N/A	50	3.7	525.0
Arkansas	524	8.2	354	5.6	-32.4	74	N/A	74	4.7	0.0
California	4,969	4.2	7,313	4.0	47.2	1,355	5.8	1,358	4.2	0.2
Colorado	170	1.3	546	1.7	221.2	50	3.7	67	2.1	34.0
Connecticut	703	2.7	900	2.8	28.0	119	5.9	181	6.0	52.1
Delaware	52	2.7	246	7.4	373.1	0	0.0	52	N/A	N/A
DC	2,934	14.2	2,963	13.2	1.0	1,659	19.9	1,342	14.0	-19.1
Florida	1,820	6.9	3,483	6.6	91.4	168	3.0	494	8.6	194.0
Georgia	3,071	13.8	3,491	11.8	13.7	481	10.0	843	13.3	75.3
Hawaii	27	0.7	72	1.1	166.7	1	N/A	0	0.0	-100.0
Idaho	11	0.4	29	0.4	163.6	1	N/A	2	0.7	100.0
Illinois	3,579	5.7	6,314	7.1	76.4	539	4.2	832	4.8	54.4
Indiana	936	3.3	1,246	4.0	33.1	194	9.5	196	3.2	1.0
Iowa	283	2.0	350	1.8	23.7	73	2.1	203	3.4	178.1
Kansas	298	2.0	385	2.0	29.2	38	44.7	66	2.8	73.7
Kentucky	529	3.5	538	3.0	1.7	87	4.6	140	3.2	60.9
Louisiana	2,707	15.6	2,870	14.1	6.0	280	8.8	512	12.2	82.9
Maine	3	0.2	10	0.2	233.3	1	0.3	5	1.2	400.0
Maryland	2,010	9.4	3,514	9.7	74.8	230	26.1	464	12.9	101.7
Massachusetts	1,099	2.3	1,943	2.7	76.8	554	5.1	629	4.6	13.5
Michigan	2,940	6.3	3,632	6.2	23.5	582	14.7	775	7.5	33.2
Minnesota	148	0.9	329	1.3	122.3	89	2.7	122	1.9	37.1
Mississippi	2,053	24.9	1,963	18.8	-4.4	81	12.5	126	7.7	55.6
Missouri	1,271	5.3	2,025	5.8	59.3	258	3.9	298	3.2	15.5
Montana	3	0.2	8	0.2	166.7	0	N/A	0	0.0	N/A
Nebraska	113	1.4	172	1.4	52.2	50	3.5	69	2.5	38.0
Nevada	39	2.5	120	2.3	207.7	0	N/A	1	0.6	N/A
New Hampshire	20	0.6	67	0.8	235.0	10	1.5	6	1.1	-40.0
New Jersey	1,442	4.7	1,745	4.2	21.0	466	17.4	567	10.0	21.7
New Mexico	71	1.1	127	1.3	78.9	8	N/A	8	1.2	0.0
New York	6,551	5.5	10,148	6.1	54.9	846	3.8	1,531	6.2	81.0
North Carolina	1,887	10.1	2,871	9.7	52.1	453	12.9	554	9.9	22.3
North Dakota	11	0.7	4	0.2	-63.6	1	N/A	0	0.0	-100.0
Ohio	3,034	5.9	3,234	5.1	6.6	758	17.0	808	6.1	6.6
Oklahoma	496	3.3	853	4.1	72.0	75	5.7	138	3.7	84.0
Oregon	93	0.9	163	1.0	75.3	31	1.2	50	1.4	61.3
Pennsylvania	2,291	4.1	3,124	4.1	36.4	811	8.6	807	4.9	-0.5
Rhode Island	77	1.3	134	1.4	74.0	23	7.7	19	4.8	-17.4
South Carolina	1,069	11.6	1,676	10.0	56.8	92	14.7	143	23.3	55.4
South Dakota	6	0.3	41	1.2	583.3	0	0.0	2	0.4	N/A
Tennessee	1,244	8.6	1,899	8.5	52.7	942	34.1	736	10.4	-21.9
Texas	4,333	6.2	5,176	5.3	19.5	649	10.7	792	4.3	22.0
Utah	58	0.8	31	0.3	-46.6	8	1.8	10	0.6	25.0
Vermont	25	1.1	60	1.5	140.0	1	0.4	4	0.5	300.0
Virginia	1,949	10.1	3,831	13.0	96.6	190	10.6	488	13.5	156.8
Washington	304	2.1	295	1.5	-3.0	39	2.5	62	1.7	59.0
West Virginia	213	2.0	208	2.4	-2.3	9	N/A	26	1.9	188.9
Wisconsin	436	2.3	558	1.9	28.0	105	5.9	89	2.5	-15.2
Wyoming	3	0.3	10	0.3	233.3	1	N/A	3	1.5	200.0

Source: U.S. Department of Education, National Center for Education Statistics, 1980 Higher Education Information System (HEGIS) and 1990 Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Surveys.

Note: Although the HEGIS and IPEDS data reported here are historically comparable in items of the reporting institutions, there are some differences in imputation procedures used in the two surveys.

Table 24
Hispanic Graduate and Professional Enrollments by State, 1980 and 1990

	GRADUATE ENROLLMENT					PROFESSIONAL ENROLLMENT				
	1980	Percent 1980	1990	Percent 1990	Percent Change 1980-90	1980	Percent 1980	1990	Percent 1990	Percent Change 1980-90
STATES										
Alabama	50	0.4	130	0.6	160.0	20	0.6	39	1.3	95.0
Alaska	14	1.5	12	1.0	-14.3	0	0.0	0	N/A	N/A
Arizona	521	3.1	1,512	5.6	190.2	66	4.8	166	11.5	151.5
Arkansas	24	0.4	29	0.5	20.8	4	0.3	11	0.7	175.0
California	5,204	4.4	11,691	6.8	124.7	1,913	6.0	2,131	6.8	11.4
Colorado	327	2.5	1,131	3.4	245.9	112	3.6	176	5.8	57.1
Connecticut	372	1.4	546	1.7	46.8	55	1.8	121	3.8	120.0
Delaware	9	0.5	25	0.8	177.8	0	N/A	30	1.6	N/A
DC	330	1.6	545	2.4	65.2	202	2.1	323	3.9	59.9
Florida	1,205	4.6	3,918	7.5	225.1	303	5.3	1,101	14.6	263.4
Georgia	121	0.5	332	1.1	174.4	44	0.7	155	2.0	252.3
Hawaii	23	0.6	56	0.9	143.5	1	0.2	2	0.5	100.0
Idaho	31	1.1	114	1.7	267.7	0	0.0	11	2.2	N/A
Illinois	764	1.2	1,734	2.0	127.0	274	1.6	616	3.6	124.8
Indiana	240	0.8	413	1.3	72.1	67	1.1	99	1.9	47.8
Iowa	83	0.6	179	0.9	115.7	55	0.9	162	2.7	194.5
Kansas	116	0.8	217	1.1	87.1	33	1.4	100	4.6	203.0
Kentucky	58	0.4	96	0.5	65.5	19	0.4	18	0.4	-5.3
Louisiana	247	1.4	308	1.5	24.7	59	1.4	178	3.1	201.7
Maine	5	0.3	6	0.1	20.0	0	0.0	11	1.8	N/A
Maryland	199	0.9	458	1.3	130.2	35	1.0	91	2.0	160.0
Massachusetts	884	1.8	1,376	1.9	55.7	297	2.2	436	3.4	46.8
Michigan	490	1.0	800	1.4	63.3	168	1.6	249	2.4	48.2
Minnesota	91	0.6	197	0.8	116.5	76	1.2	91	1.6	19.7
Mississippi	33	0.4	39	0.4	18.2	2	0.1	12	0.6	500.0
Missouri	166	0.7	475	1.4	186.1	85	0.9	165	1.8	94.1
Montana	5	0.3	19	0.5	280.0	3	1.2	2	1.0	-33.3
Nebraska	34	0.4	102	0.8	200.0	45	1.6	87	3.2	93.3
Nevada	21	1.3	168	3.2	700.0	2	1.1	2	1.1	0.0
New Hampshire	16	0.5	62	0.8	287.5	10	1.8	8	1.2	-20.0
New Jersey	635	2.1	1,203	2.9	89.4	218	3.8	298	4.8	36.7
New Mexico	970	15.4	1,635	16.1	68.6	131	20.3	134	22.0	2.3
New York	4,252	3.6	6,390	3.8	50.3	565	2.3	1,276	4.9	125.8
North Carolina	80	0.4	235	0.8	193.8	25	0.4	60	1.0	140.0
North Dakota	5	0.3	25	1.2	400.0	0	0.0	6	1.2	N/A
Ohio	422	0.8	596	0.9	41.2	121	0.9	167	1.4	38.0
Oklahoma	121	0.8	245	1.2	102.5	31	0.8	56	1.8	80.6
Oregon	72	0.7	189	1.2	162.5	47	1.3	83	2.5	76.6
Pennsylvania	371	0.7	654	0.9	76.3	200	1.2	333	2.8	66.5
Rhode Island	42	0.7	97	1.0	131.0	9	2.3	10	4.9	11.1
South Carolina	33	0.4	91	0.5	175.8	5	0.8	14	0.6	180.0
South Dakota	6	0.3	7	0.2	16.7	0	0.0	2	0.5	N/A
Tennessee	54	0.4	121	0.5	124.1	34	0.5	50	1.1	47.1
Texas	4,874	7.0	7,705	7.9	58.1	995	5.5	1,368	9.1	37.5
Utah	90	1.2	108	1.1	20.0	33	1.9	59	5.1	78.8
Vermont	14	0.6	114	2.8	714.3	6	0.8	10	1.7	66.7
Virginia	132	0.7	388	1.3	193.9	22	0.6	66	2.1	200.0
Washington	153	1.1	267	1.3	74.5	39	1.1	75	2.5	92.3
West Virginia	17	0.2	29	0.3	70.6	4	0.3	8	0.6	100.0
Wisconsin	210	1.1	352	1.2	67.6	89	2.5	183	5.8	105.6
Wyoming	10	0.9	25	0.9	150.0	1	0.5	8	3.6	700.0

Source: U.S. Department of Education Statistics, National Center for Education, 1980 Higher Education Information System (HEGIS) and 1990 Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Surveys.

Note: Although the HEGIS and IPEDS data reported here are historically comparable in items of the reporting institutions, there are some differences in imputation procedures used in the two surveys.

Table 25
Asian American Graduate and Professional Enrollments by State, 1980 and 1990

	GRADUATE ENROLLMENT					PROFESSIONAL ENROLLMENT				
	1980	Percent 1980	1990	Percent 1990	Percent Change 1980-90	1980	Percent 1980	1990	Percent 1990	Percent Change 1980-90
STATES										
Alabama	204	1.4	263	1.3	28.9	13	1.2	81	2.3	523.1
Alaska	19	2.1	24	1.9	26.3	0	N/A	0	0.0	N/A
Arizona	149	0.9	680	2.5	356.4	13	N/A	74	5.4	469.2
Arkansas	49	0.8	66	1.0	34.7	15	N/A	26	1.7	73.3
California	6,949	5.9	16,322	9.0	134.9	2,310	9.9	4,872	15.2	110.9
Colorado	154	1.2	662	2.0	329.9	42	3.1	86	2.7	104.8
Connecticut	288	1.1	704	2.2	144.4	47	2.3	155	5.1	229.8
Delaware	5	0.3	40	1.2	700.0	0	0.0	18	N/A	N/A
DC	512	2.5	850	3.8	66.0	201	2.4	536	5.6	166.7
Florida	245	0.9	935	1.8	281.6	26	0.5	346	6.1	1230.8
Georgia	203	0.9	487	1.6	139.9	32	0.7	185	2.9	478.1
Hawaii	1,402	38.3	2,650	39.6	89.0	325	N/A	317	61.6	-2.5
Idaho	64	2.3	102	1.5	59.4	3	N/A	19	6.5	533.3
Illinois	1,674	2.7	3,435	3.9	105.2	361	2.8	1,623	9.4	349.6
Indiana	280	1.0	733	2.3	161.8	51	2.5	174	2.8	241.2
Iowa	140	1.0	267	1.4	90.7	52	1.5	223	3.7	328.8
Kansas	93	0.6	345	1.8	271.0	25	29.4	90	3.8	260.0
Kentucky	95	0.6	204	1.1	114.7	69	3.7	77	1.7	11.6
Louisiana	113	0.6	239	1.2	111.5	46	1.4	228	5.4	395.7
Maine	7	0.4	33	0.7	371.4	1	0.3	12	2.8	1100.0
Maryland	313	1.5	1,246	3.4	298.1	106	12.0	351	9.7	231.1
Massachusetts	748	1.5	1,833	2.6	145.1	277	2.6	932	6.8	236.5
Michigan	699	1.5	1,443	2.5	106.4	141	3.6	553	5.3	292.2
Minnesota	252	1.6	401	1.6	59.1	42	1.3	188	2.9	347.6
Mississippi	40	0.5	186	1.8	365.0	17	2.6	39	2.4	129.4
Missouri	325	1.4	646	1.8	98.8	181	2.7	462	4.9	155.2
Montana	15	0.8	7	0.2	-53.3	1	N/A	0	0.0	-100.0
Nebraska	39	0.5	137	1.1	251.3	46	3.2	164	5.8	256.5
Nevada	25	1.6	109	2.0	336.0	9	N/A	8	4.6	-11.1
New Hampshire	43	1.3	134	1.7	211.6	5	0.7	36	6.6	620.0
New Jersey	638	2.1	1,658	4.0	159.9	83	3.1	444	7.8	434.9
New Mexico	49	0.8	133	1.3	171.4	12	N/A	18	2.8	50.0
New York	3,286	2.8	6,951	4.2	111.5	477	2.2	2,148	8.7	350.3
North Carolina	135	0.7	428	1.4	217.0	46	1.3	196	3.5	326.1
North Dakota	23	1.4	70	3.2	204.3	1	N/A	9	1.8	800.0
Ohio	641	1.2	1,041	1.6	62.4	146	3.3	548	4.1	275.3
Oklahoma	153	1.0	329	1.6	115.0	25	1.9	95	2.5	280.0
Oregon	172	1.7	477	3.0	177.3	129	5.2	222	6.0	72.1
Pennsylvania	795	1.4	1,569	2.1	97.4	231	2.5	969	5.8	319.5
Rhode Island	67	1.2	153	1.6	128.4	16	5.3	62	15.7	287.5
South Carolina	25	0.3	132	0.8	428.0	15	2.4	55	8.9	266.7
South Dakota	5	0.3	29	0.8	480.0	3	4.8	1	0.2	-66.7
Tennessee	80	0.5	251	1.1	213.8	46	1.7	141	2.0	206.5
Texas	1,022	1.5	2,536	2.6	148.1	177	2.9	1,122	6.2	533.9
Utah	107	1.4	117	1.2	9.3	32	7.1	48	2.8	50.0
Vermont	9	0.4	73	1.8	711.1	3	1.2	22	3.0	633.3
Virginia	269	1.4	854	2.9	217.5	62	3.5	324	8.9	422.6
Washington	480	3.3	725	3.6	51.0	81	5.3	190	5.3	134.6
West Virginia	76	0.7	73	0.8	-3.9	7	N/A	70	5.2	900.0
Wisconsin	307	1.6	439	1.5	43.0	56	3.1	220	6.1	292.9
Wyoming	4	0.4	11	0.4	175.0	1	N/A	2	1.0	100.0

Source: U.S. Department of Education Statistics, National Center for Education, 1980 Higher Education Information System (HEGIS) and 1990 Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Surveys.

Note: Although the HEGIS and IPEDS data reported here are historically comparable in items of the reporting institutions, there are some differences in imputation procedures used in the two surveys.

Table 26
American Indian Graduate and Professional Enrollments by State, 1980 and 1990

	GRADUATE ENROLLMENT					PROFESSIONAL ENROLLMENT				
	1980	Percent 1980	1990	Percent 1990	Percent Change 1980-90	1980	Percent 1980	1990	Percent 1990	Percent Change 1980-90
STATES										
Alabama	26	0.2	38	0.2	46.2	4	0.1	12	0.4	200.0
Alaska	15	1.6	21	1.7	40.0	0	0.0	0	N/A	N/A
Arizona	141	0.8	307	1.1	117.7	13	1.0	34	2.4	161.5
Arkansas	48	0.7	31	0.5	-35.4	5	0.3	6	0.4	20.0
California	698	0.6	1,117	0.7	60.0	117	0.4	183	0.6	56.4
Colorado	42	0.3	193	0.6	359.5	19	0.6	25	0.8	31.6
Connecticut	54	0.2	45	0.1	-16.7	8	0.3	10	0.3	25.0
Delaware	3	0.2	5	0.2	66.7	0	N/A	0	0.0	N/A
DC	41	0.2	121	0.5	195.1	17	0.2	18	0.2	5.9
Florida	49	0.2	122	0.2	149.0	7	0.1	26	0.3	271.4
Georgia	22	0.1	77	0.3	250.0	7	0.1	13	0.2	85.7
Hawaii	16	0.4	28	0.4	75.0	0	0.0	0	0.0	N/A
Idaho	14	0.5	27	0.4	92.9	2	0.7	1	0.2	-50.0
Illinois	128	0.2	168	0.2	31.3	19	0.1	35	0.2	84.2
Indiana	74	0.3	70	0.2	-5.4	13	0.2	9	0.2	-30.8
Iowa	18	0.1	34	0.2	88.9	16	0.3	27	0.4	68.8
Kansas	53	0.4	134	0.7	152.8	12	0.5	12	0.6	0.0
Kentucky	60	0.4	32	0.2	-46.7	5	0.1	6	0.1	20.0
Louisiana	33	0.2	70	0.3	112.1	12	0.3	11	0.2	-8.3
Maine	2	0.1	7	0.1	250.0	0	0.0	1	0.2	N/A
Maryland	48	0.2	71	0.2	47.9	3	0.1	2	0.0	-33.3
Massachusetts	96	0.2	121	0.2	26.0	36	0.3	42	0.3	16.7
Michigan	132	0.3	199	0.3	50.8	25	0.2	51	0.5	104.0
Minnesota	34	0.2	95	0.4	179.4	33	0.5	35	0.6	6.1
Mississippi	11	0.1	19	0.2	72.7	2	0.1	4	0.2	100.0
Missouri	67	0.3	116	0.3	73.1	25	0.3	35	0.4	40.0
Montana	34	1.8	57	1.6	67.6	3	1.2	8	3.8	166.7
Nebraska	5	0.1	24	0.2	380.0	11	0.4	9	0.3	-18.2
Nevada	7	0.4	32	0.6	357.1	0	0.0	0	0.0	N/A
New Hampshire	3	0.1	12	0.2	300.0	5	0.9	7	1.0	40.0
New Jersey	61	0.2	98	0.2	60.7	8	0.1	6	0.1	-25.0
New Mexico	84	1.3	179	1.8	113.1	30	4.7	29	4.8	-3.3
New York	289	0.2	360	0.2	24.6	25	0.1	39	0.1	56.0
North Carolina	101	0.5	176	0.6	74.3	32	0.6	30	0.5	-6.3
North Dakota	32	2.0	29	1.3	-9.4	10	2.0	28	5.7	180.0
Ohio	108	0.2	161	0.3	49.1	42	0.3	20	0.2	-52.4
Oklahoma	407	2.7	690	3.3	69.5	78	2.1	123	3.9	57.7
Oregon	68	0.7	98	0.6	44.1	16	0.4	39	1.2	143.8
Pennsylvania	118	0.2	132	0.2	11.9	19	0.1	30	0.2	57.9
Rhode Island	8	0.1	21	0.2	162.5	0	0.0	0	0.0	N/A
South Carolina	8	0.1	43	0.3	437.5	1	0.2	4	0.2	300.0
South Dakota	34	1.8	57	1.6	67.6	3	0.6	5	1.1	66.7
Tennessee	19	0.1	38	0.2	100.0	17	0.2	3	0.1	-82.4
Texas	273	0.4	270	0.3	-1.1	40	0.2	67	0.4	67.5
Utah	72	0.9	36	0.4	-50.0	9	0.5	10	0.9	11.1
Vermont	4	0.2	36	0.9	800.0	0	0.0	1	0.2	N/A
Virginia	57	0.3	69	0.2	21.1	4	0.1	5	0.2	25.0
Washington	98	0.7	166	0.8	69.4	14	0.4	43	1.4	207.1
West Virginia	22	0.2	10	0.1	-54.5	1	0.1	3	0.2	200.0
Wisconsin	49	0.3	107	0.4	118.4	24	0.7	29	0.9	20.8
Wyoming	2	0.2	17	0.6	750.0	0	0.0	0	0.0	N/A

Source: U.S. Department of Education Statistics, National Center for Education. 1980 Higher Education Information System (HEGIS) and 1990 Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Surveys.

Note: Although the HEGIS and IPEDS data reported here are historically comparable in items of the reporting institutions, there are some differences in imputation procedures used in the two surveys.

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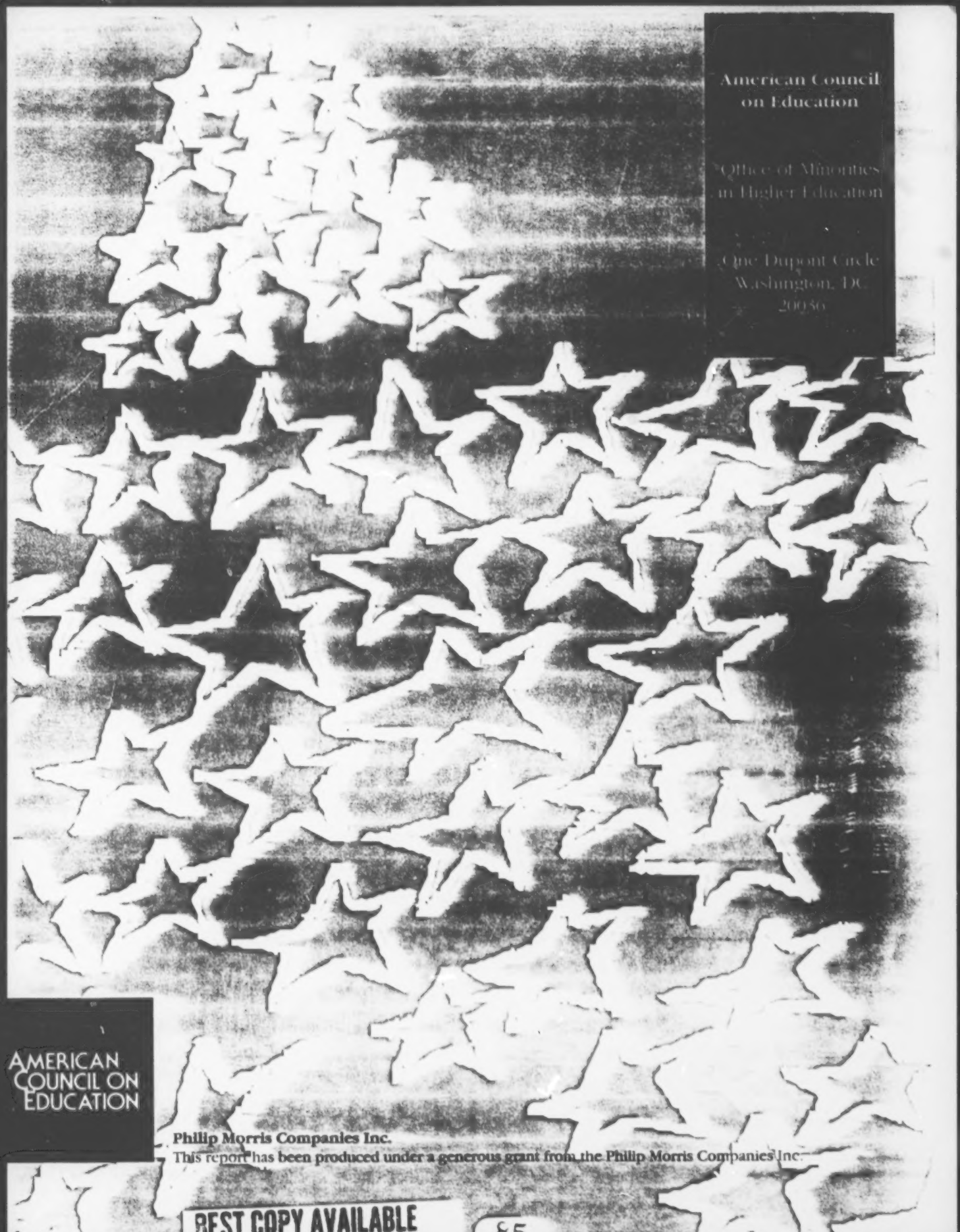

American Council on Education

Office of Minorities in Higher Education

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